GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: June 12, 2003, 15:26:44 ; Search time 49 Seconds
(without alignments)
1006.178 Million cell updates/sec

Title: US-09-662-783-2
Perfect score: 1994
Sequence: 1 MHRLIFVYTLICANFCSCRD.....DIQLDHHERCDCICSSRPPR 370

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_101002:*
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2: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1994	100.0	370	21	AAB48653	Human growth facto
2	1994	100.0	370	21	AAY96864	SEQ. ID. 37 from W
3	1994	100.0	370	21	AAY71130	Human Platelet Der
4	1994	100.0	370	22	AAG65601	Human zvegf4 polyp
5	1994	100.0	370	22	AAB85529	Human secreted pro
6	1994	100.0	370	22	AAU00698	Human FCTR1 protei
7	1994	100.0	370	22	AAU00704	Human PDGFD protei
8	1994	100.0	370	22	AAE00999	Human Zvegf4 prote
9	1994	100.0	370	22	AAB60888	Human VEGF-G prote
10	1994	100.0	370	23	ABP51640	Human zvegf4 prote
11	1994	100.0	370	23	ABG64733	Human albumin fusi
12	1994	100.0	370	23	AAB47891	Human zvegf4. Hom
13	1994	100.0	370	23	AAE15819	Human LP85 protein
14	1989	99.7	370	23	AAE15845	Human LP85 mutant
15	1989	99.7	370	23	AAE15849	Human LP85 mutant
16	1988	99.7	370	22	AAB85547	Human secreted pro
17	1988	99.7	370	23	ABG64732	Human albumin fusi
18	1988	99.7	370	23	AAE15844	Human LP85 mutant
19	1988	99.7	370	23	AAE15846	Human LP85 mutant
20	1988	99.7	370	23	AAE15847	Human LP85 mutant
21	1988	99.7	370	23	AAE15851	Human LP85 mutant
22	1986	99.6	370	23	AAE15848	Human LP85 mutant
23	1984	99.5	370	23	AAE15850	Human LP85 mutant
24	1949	97.7	364	22	AAU12264	Human PRO4345 poly
25	1949	97.7	364	23	ABB95579	Human angiogenesis
26	1949	97.7	364	23	ABB84973	Human PRO4345 prot
27	1949	97.7	364	23	AAE15820	Human LP85 protein
28	1925	96.5	358	23	AAE15852	Human mature LP85
29	1742	87.4	322	21	AAY71129	Human Platelet Der
30	1737	87.1	370	21	AAB48663	Mouse growth facto
31	1737	87.1	370	22	AAG65602	Mouse zvegf4 polyp
32	1737	87.1	370	22	AAU00700	Mouse FCTR3 protei
33	1737	87.1	370	23	ABP51641	Mouse zvegf4 prote
34	1732	86.9	370	22	AAB60895	Human VEGF-G prote
35	1149	57.6	261	22	AAU00701	Mouse FCTR4 protei
36	1018	51.1	188	22	AAB85563	Human secreted pro
37	982	49.2	200	21	AAY71128	Human Platelet Der
38	835	41.9	152	22	ABB11697	Human novel protei
39	825	41.4	159	22	AAB85548	Human secreted pro
40	825	41.4	159	23	ABG64730	Human albumin fusi
41	756.5	37.9	339	21	AAB58438	Lung cancer associ
42	752	37.7	345	21	AAB48658	Mouse zvegf3, SEQ
43	752	37.7	345	21	AAY96861	Murine vascular en
44	752	37.7	345	21	AAY84559	A murine platelet-
45	752	37.7	345	22	AAE00998	Mouse Zvegf3 prote

ALIGNMENTS

RESULT 1
AAB48653
ID AAB48653 standard; Protein; 370 AA.
XX
AC AAB48653;
XX
DT 09-MAR-2001 (first entry)
XX
DE Human growth factor homologue zvegf4, SEQ ID NO:2.
XX
KW Human; zvegf4; growth factor homologue; VEGF/PDGF family;
KW CUB domain; PDGF-like activity; mitogenic; osteogenic;
KW neovascularisation; tissue repair; proliferation; differentiation;
KW liver damage; neuroregenerative; Alzheimer's disease; multiple sclerosis;
KW periodontal disease; bone fracture; wound healing; vulnerary; ischaemia;
KW immunomodulation; hepatic; chromosome 11q22.3-23.1.
XX
OS Homo sapiens.
XX
PN WO200066736-A1.
XX
PD 09-NOV-2000.
XX
PF 03-MAY-2000; 2000WO-US40047.
XX
PR 03-MAY-1999; 99US-0304216.
PR 10-NOV-1999; 99US-0164463.
PR 04-FEB-2000; 2000US-0180169.
XX
PA (ZYMO) ZYMOGENETICS INC.
XX
PI Gilbert T, Hart CE, Sheppard PO, Gilbertson DG;
XX

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DR   WPI; 2000-687541/67.
DR   N-PSDB; AAC81555.
XX
PT   Growth factor homologs and the nucleic acids that encode them, useful
PT   e.g. for treating liver damage, ischemia, multiple sclerosis and
PT   Alzheimer's disease -
XX
PS   Claim 1; Page 110-111; 143pp; English.
XX
CC   The invention relates to the human growth factor homologue zvegf4
CC   (AAB48653), and nucleic acids encoding it (AAC81555). Zvegf4 is a member
CC   of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial
CC   growth factor) family. Zvegf4 has a growth factor domain (AAB48654)
CC   characterised by a PDGF cystine knot structure, and a CUB domain
CC   (AAB48655) which has a beta barrel structure. Zvegf4 has PDGF-like
CC   activity, having mitogenic activity on fibroblasts, vascular smooth
CC   muscle cells and pericytes, and has also been shown to stimulate bone
CC   growth. The invention also relates to fusion proteins comprising human
CC   zvegf4 or fragments thereof, particularly human zvegf4/human zvegf3
CC   fusions; expression constructs and host cells comprising human zvegf4
CC   nucleic acids; the recombinant expression of human zvegf4; an antibody
CC   which binds to human zvegf4 or a fragment thereof; a method of activating
CC   a cell-surface PDGF receptor using a zvegf4-derived polypeptide; a
CC   method of modulating the proliferation, differentiation, migration or
CC   metabolism of bone cells, comprising exposing bone cells to
CC   zvegf4-derived polypeptides; and a method of detecting a genetic
CC   abnormality in the zvegf4 gene of a patient. Zvegf4 proteins and derived
CC   fragments may be used to stimulate tissue development or repair, or
CC   cellular differentiation or proliferation. They are particularly used for
CC   the treatment or repair of liver damage, and may also be used to
CC   modulate neurite growth (e.g., in the treatment of Alzheimer's disease or
CC   multiple sclerosis). Due to their osteogenic activity, they may be used
CC   in the treatment of periodontal disease and fractures. They may also be
CC   used to enhance expansion and mobilisation of haematopoietic stem cells
CC   and endothelial precursor stem cells, which may be useful in the
CC   treatment of ischaemia, in wound healing, and in the modulation of the
CC   immune system. The present sequence represents human zvegf4.
XX
SQ   Sequence   370 AA;

  Query Match           100.0%;  Score 1994;  DB 21;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
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Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
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Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
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Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
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Db        361 DCICSSRPPR 370
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RESULT 2
AAY96864
ID   AAY96864 standard; Protein; 370 AA.
XX
AC   AAY96864;
XX
DT   26-SEP-2000  (first entry)
XX
DE   SEQ. ID. 37 from WO0034474.
XX
KW   Vascular endothelial growth factor; homologue; zvegf3; CUB domain;
KW   Cysteine knot; platelet-derived growth factor; PDGF; neuropilin;
KW   chromosome 4q28.3; cytostatic; anti-psoriatic; anti-inflammatory;
KW   anti-diabetic; ophthalmological; anti-rheumatic; anti-arthritic;
KW   vulnerary.
XX
OS   Homo sapiens.
XX
PN   WO200034474-A2.
XX
PD   15-JUN-2000.
XX
PF   07-DEC-1999;   99WO-US28968.
XX
PR   07-DEC-1998;   98US-0207120.
PR   06-JUL-1999;   99US-0142576.
PR   21-OCT-1999;   99US-0161653.
PR   12-NOV-1999;   99US-0165255.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gao Z,  Hart CE,  Piddington CS,  Sheppard PO,  Shoemaker KE;
PI   Gilbertson DG,  West JW;
XX
DR   WPI; 2000-423420/36.
DR   N-PSDB; AAA51541.
XX
PT   Novel zvegf3 polypeptides and nucleotides encoding them useful for
PT   stimulating growth of smooth muscle cells and fibroblasts comprising an
PT   epitope bearing portion of a specific amino acid sequence
XX
PS   Disclosure; Page 164-165; 173pp; English.
XX
CC   Polypeptides comprising an epitope-bearing portion human or murine
CC   ZVEGF3 (vascular endothelial growth factor homologue) are claimed. The
CC   growth factors comprise a growth factor domain and a CUB domain (generic
CC   sequence motifs are shown in AAY96859 and AAY96860). The growth factor
CC   domain is characterized by an arrangement of cysteine residues and
CC   beta-strands that is characteristic of the "cysteine knot" structure of
CC   the platelet-derived growth factor (PDGF) family. The CUB domain shows
CC   homology to CUB domains in neuropilins, human bone morphogenetic
CC   protein-1, porcine seminal plasma protein, bovine acidic seminal fluid
CC   protein and Xenopus laevis tolloid-like protein. Structural analysis and
CC   homology predict that ZVEGF3 polypeptides complex with a second
CC   polypeptide to form multimeric proteins. The human zvegf3 gene has been
CC   mapped to chromosome 4q28.3. ZVEGF3 is useful for stimulating the growth
CC   of fibroblasts or smooth muscles cells, for activating cell surface
CC   PDGF-alpha receptor and for inhibiting PDGF-alpha receptor mediated
CC   cellular processes. ZVEGF3 is useful for regulating (post-development)
CC   organ growth, regeneration and maintenance, as well as tissue
CC   maintenance and repair processes. ZVEGF3 antagonists are useful for
CC   treating cancer, rheumatoid arthritis, diabetic retinopathy, ischemic
CC   limb disease, peripheral vascular disease, myocardial ischemia, vascular
CC   intimal hyperplasia, atherosclerosis, wound healing, chronic liver
CC   disease and haemangioma formation. ZVEGF3 can also be used to modulate
CC   neurite growth and development of the nervous system, and for treating
CC   neurodegenerative diseases.
XX
SQ   Sequence   370 AA;

  Query Match           100.0%;  Score 1994;  DB 21;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
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Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
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Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
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Qy        361 DCICSSRPPR 370
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Db        361 DCICSSRPPR 370
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RESULT 3
AAY71130
ID   AAY71130 standard; Protein; 370 AA.
XX
AC   AAY71130;
XX
DT   08-SEP-2000  (first entry)
XX
DE   Human Platelet Derived Growth Factor (PDGF)-D protein.
XX
KW   Platelet Derived Growth Factor-D; PDGF-D; human; cytostatic; vulnerary;
KW   VEGF-G; Vascular Endothelial Growth Factor; antiatherosclerotic; tumour;
KW   proliferative; activator; proliferation; differentiation; motility;
KW   growth; PDGF-D receptor; antagonist; tissue remodelling; treat;
KW   atherosclerosis; wound; metastasis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
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FT                   /label= CUB_domain
FT                   /note= "Participates in protein-protein or carbohydrate
FT                   interactions"
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PN   WO200027879-A1.
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PD   18-MAY-2000.
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PF   10-NOV-1999;   99WO-US26462.
XX
PR   10-NOV-1998;   98US-0107852.
PR   28-DEC-1998;   98US-0113997.
PR   26-AUG-1999;   99US-0150604.
PR   04-OCT-1999;   99US-0157108.
PR   05-OCT-1999;   99US-0157756.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
PA   (UYHE-) UNIV HELSINKI LICENSING LTD OY.
XX
PI   Eriksson U,  Aase K,  Ponten A,  Lee X,  Uutela M,  Alitalo K;
PI   Oestman A,  Heldin C;
XX
DR   WPI; 2000-376495/32.
DR   N-PSDB; AAD00738.
XX
PT   Novel polynucleotides encoding a novel growth factor of cells
PT   expressing a platelet-derived growth factor, useful for diagnostic and
PT   therapeutic applications, e.g. concerning cancer -
XX
PS   Claim 25; Fig 8; 111pp; English.
XX
CC   The present sequence is the complete human platelet derived growth factor
CC   (PDGF)-D, formally known as Vascular Endothelial Growth Factor (VEGF)-G.
CC   It is derived from human foetal lung lambdagt10 cDNA library. It belongs
CC   to the VEGF/PDGF family. It functions as an activator of proliferation,
CC   differentiation, growth and motility of cells, that express PDGF-D
CC   receptor. This sequence is useful for inhibiting the growth of tumours,
CC   that express PDGF-D. Expression of PDGF-D and its proteolytic cleavage
CC   for generating an activated truncated form is useful for regulating
CC   receptor binding specificity of PDGF-D. PDGF-D antagonist is useful for
CC   inhibiting tissue remodelling during the invasion of tumour cells into
CC   normal cells. PDGF-D may be used to treat wounds, atherosclerosis,
CC   metastasis and migration of smooth muscle cells.
XX
SQ   Sequence   370 AA;

  Query Match             100.0%;  Score 1994;  DB 21;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
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Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370
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RESULT 4
AAG65601
ID   AAG65601 standard; Protein; 370 AA.
XX
AC   AAG65601;
XX
DT   07-JAN-2002  (first entry)
XX
DE   Human zvegf4 polypeptide.
XX
KW   Zvegf4; bone; ligament; cartilage; osteoblast; osteoclast; chondrocyte;
KW   bone cancer; osteonecrosis; bone defect; osteogenesis; osteoporosis;
KW   osteopathic; vulnerary; human.
XX
```

```
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
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FT   Protein         19..370
FT                   /note= "mature protein"
FT   Domain          52..179
FT                   /note= "CUB domain"
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FT                   /note= "propeptide-like sequence"
FT   Domain          258..370
FT                   /note= "growth factor domain"
XX
PN   WO200157083-A1.
XX
PD   09-AUG-2001.
XX
PF   03-MAY-2000; 2000WO-US12095.
XX
PR   04-FEB-2000; 2000US-180169P.
PR   31-MAR-2000; 2000US-0540224.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gilbertson DG,  Hart CE;
XX
DR   WPI; 2001-611088/70.
DR   N-PSDB; AAH47772.
XX
PT   Use of zvegf4 polypeptide for promoting bone, ligament or cartilage
PT   growth in mammal at site of fracture, implant, and bone graft, and for
PT   promoting growth or differentiation of osteoblasts, chondrocytes in
PT   culture -
XX
PS   Example 2; Page 44-47; 57pp; English.
XX
CC   The invention relates to the use of zvegf4 polypeptide for promoting
CC   bone, ligament or cartilage growth in a mammal, and for promoting
CC   proliferation or differentiation of osteoblasts, osteoclasts,
CC   chondrocytes or bone marrow stem cells in culture. For promoting
CC   cartilage growth, chondrocytes are cultured ex vivo in presence of the
CC   zvegf4 polypeptide and then placed into mammal where cartilage is to be
CC   grown. Zvegf4 polypeptide is useful for promoting growth of bone,
CC   ligament or cartilage in a mammal at a site of bony defect such as
CC   fracture, bone graft, implant or periodontal pocket, in humans and non-
CC   human animals such as domestic animals including livestock and companion
CC   animals. Zvegf4 is used for promoting growth of bone, ligament, or
CC   cartilage in conditions of bone defects following therapeutic treatments
CC   of bone cancers or other conditions characterized by increased bone loss
CC   or decreased bone formation, or elevation of peak bone mass in pre-
CC   menopausal woman. It is also useful for healing bone following radiation
CC   -induced osteonecrosis, repairing bone defects arising from surgery, and
CC   promotion of bone healing in plastic surgery, increasing bone formation
CC   during distraction osteogenesis, treating bone injuries including repair
CC   of cartilage and ligament and treatment of osteoporosis. The present
CC   sequence represents a human zvegf4 polypeptide.
XX
SQ   Sequence   370 AA;

  Query Match             100.0%;  Score 1994;  DB 22;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 5
AAB85529
ID   AAB85529 standard; protein; 370 AA.
XX
AC   AAB85529;
XX
DT   25-SEP-2001  (first entry)
XX
DE   Human secreted protein (clone Id HGCNC48).
XX
KW   Secreted protein; immunosuppressive; antiarthritic; antirheumatic;
KW   antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective;
KW   nootropic; neuroprotective; antibacterial; virucide; fungicide; human;
KW   opthalmalogical; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO200155430-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01431.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   12-SEP-2000; 2000US-0231968.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Komatsoulis GA,  Baker KP,  Birse CE,  Soppet DR,  Olsen HS;
PI   Moore PA,  Wei P,  Ebner R,  Duan DR,  Shi Y,  Choi GH,  Fiscella M;
PI   Ni J,  Ruben SM,  Barash SC;
XX
DR   WPI; 2001-476220/51.
DR   N-PSDB; AAH46939.
XX
PT   17 isolated nucleic acid molecules encoding human secreted proteins,
PT   used to preventing, treating or ameliorating a medical condition -
XX
PS   Claim 11; Page 447-449; 482pp; English.
XX
CC   The invention provides novel human secreted proteins and polynucleotides
CC   encoding them. The secreted proteins can be expressed by standard
CC   recombinant methodology. The secreted proteins and polynucleotides are
CC   used to prevent, treat or ameliorate a medical condition in e.g. humans,
CC   mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They can
CC   also be used in diagnosing a pathological condition. The antibodies to
CC   the proteins can also be used in alleviating symptoms associated with the
CC   disorders and in diagnostic immunoassays e.g. radioimmunoassays or enzyme
CC   linked immunosorbent assays (ELISA). Disorders which are diagnosed or
CC   treated include autoimmune diseases e.g. rheumatoid arthritis,
CC   hyperproliferative disorders e.g. neoplasms of the breast or liver,
CC   cardiovascular disorders e.g. cardiac arrest, cerebrovascular disorders
```

```
CC   e.g. cerebral ischemia, angiogenesis, nervous system disorders e.g.
CC   Alzheimer's disease, infections caused by bacteria, viruses and fungi and
CC   ocular disorders e.g. corneal infection. The polypeptides can also be
CC   used to aid wound healing and epithelial cell proliferation, to prevent
CC   skin aging due to sunburn, to maintain organs before transplantation, for
CC   supporting cell culture of primary tissues, to regenerate tissues and in
CC   chemotaxis. The polypeptides can also be used as a food additive or
CC   preservative to increase or decrease storage capabilities. The present
CC   sequence represents a human secreted protein.
XX
SQ   Sequence   370 AA;

  Query Match            100.0%;  Score 1994;  DB 22;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 6
AAU00698
ID   AAU00698 standard; Protein; 370 AA.
XX
AC   AAU00698;
XX
DT   07-SEP-2001  (first entry)
XX
DE   Human FCTR1 protein present in clone 30664188.0.99.
XX
KW   Bone morphogenetic protein-1; BMP-1; vascular endothelial growth factor;
KW   VEGF-E; platelet derived growth factor; PDGF; FCTRX; hyperplasia; cancer;
KW   neoplasia; anaemia; leukopenia; baldness; cardiovascular disorder;
KW   fibrotic disorder; diabetic ulcer; obesity; hyperproliferation; human;
KW   dysproliferation; neurodegenerative disorder; osteoarthritis; epilepsy;
KW   inflammatory disorder; Graft versus host disease; coagulation;
KW   haemophilia; neural disorder; Parkinson's disease; Alzheimer's disease;
KW   multiple sclerosis; Huntington's disease; amyotrophic lateral sclerosis;
KW   peripheral neuropathy; acute brain injury.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..23
FT                   /note= "Signal peptide"
FT   Protein         24..370
FT                   /note= "Mature FCTR1"
FT   Domain          53..167
FT                   /note= "CUB domain"
FT   Domain          272..306
FT                   /note= "PDGF domain"
FT   Modified-site   276
FT                   /note= "N-linked glycosylation site"
FT   Domain          302..365
FT                   /note= "Metallothionein domain"
FT   Domain          350..362
FT                   /note= "PDGF domain"
XX
PN   WO200125437-A2.
XX
PD   12-APR-2001.
XX
PF   06-OCT-2000; 2000WO-US27671.
XX
PR   07-OCT-1999;   99US-0158083.
PR   13-OCT-1999;   99US-0159231.
PR   04-JAN-2000; 2000US-0174485.
PR   03-MAR-2000; 2000US-0186707.
PR   10-MAR-2000; 2000US-0188250.
PR   08-AUG-2000; 2000US-0223879.
PR   12-SEP-2000; 2000US-0662783.
PR   20-SEP-2000; 2000US-0234082.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Lichenstein H,  Herrmann JL,  Boldog FL,  Minskoff S;
PI   Jeffers M;
XX
DR   WPI; 2001-316172/33.
DR   N-PSDB; AAS04492.
XX
PT   Novel growth factor polypeptides termed as FCTRX polypeptides, useful
PT   for treating cancer, cardiovascular and fibrotic diseases, diabetic
PT   ulcers, wound healing and neuronal disorders  -
XX
PS   Claim 1; Fig 1; 171pp; English.
XX
CC   The sequence represents a protein related to bone morphogenetic protein-1
CC   (BMP-1), vascular endothelial growth factor (VEGF-E) and platelet derived
CC   growth factor (PDGF). Polypeptides and polynucleotides related to BMP-1,
CC   VEGF-E and PDGF are referred to as FCTRX peptides and nucleic acids.
CC   FCTRX proteins are useful for treating or preventing a disorder
CC   associated with aberrant expression, aberrant processing, or aberrant
CC   physiological interactions of the proteins in a mammal, where the
CC   disorder is characterised by insufficient or ineffective growth of a cell
CC   or a tissue, e.g. hyperplasia or neoplasia. The peptides and their
CC   associated nucleic acids are useful for both promoting and inhibiting
CC   growth of cells and tissues and in treatment of cancer, anaemia,
CC   leukopenia, baldness, for treating cardiovascular and fibrotic disorders,
CC   diabetic ulcers, obesity, infectious diseases, hyperproliferative and
CC   dysproliferative disorders, neurodegenerative disorders, osteoarthritis,
CC   inflammatory disorders, Graft versus host disease, coagulation disorders
CC   such as haemophilia, and neural disorders including Parkinson's disease,
CC   Alzheimer's disease, multiple sclerosis, Huntington's disease,
CC   amyotrophic lateral sclerosis, peripheral neuropathy, acute brain injury
CC   and epilepsy.
XX
SQ   Sequence   370 AA;

  Query Match            100.0%;  Score 1994;  DB 22;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
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Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370
```

```
RESULT 7
AAU00704
ID   AAU00704 standard; Protein; 370 AA.
XX
AC   AAU00704;
XX
DT   07-SEP-2001  (first entry)
XX
DE   Human PDGFD protein.
XX
KW   Bone morphogenetic protein-1; BMP-1; vascular endothelial growth factor;
KW   VEGF-E; platelet derived growth factor; PDGF; FCTRX; hyperplasia; cancer;
KW   neoplasia; anaemia; leukopenia; baldness; cardiovascular disorder;
KW   fibrotic disorder; diabetic ulcer; obesity; hyperproliferation; human;
KW   dysproliferation; neurodegenerative disorder; osteoarthritis; epilepsy;
KW   inflammatory disorder; Graft versus host disease; coagulation;
KW   haemophilia; neural disorder; Parkinson's disease; Alzheimer's disease;
KW   multiple sclerosis; Huntington's disease; amyotrophic lateral sclerosis;
KW   peripheral neuropathy; acute brain injury.
XX
OS   Homo sapiens.
XX
PN   WO200125437-A2.
XX
PD   12-APR-2001.
XX
PF   06-OCT-2000; 2000WO-US27671.
XX
PR   07-OCT-1999;   99US-0158083.
PR   13-OCT-1999;   99US-0159231.
PR   04-JAN-2000; 2000US-0174485.
PR   03-MAR-2000; 2000US-0186707.
PR   10-MAR-2000; 2000US-0188250.
PR   08-AUG-2000; 2000US-0223879.
PR   12-SEP-2000; 2000US-0662783.
PR   20-SEP-2000; 2000US-0234082.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Lichenstein H,  Herrmann JL,  Boldog FL,  Minskoff S;
PI   Jeffers M;
XX
DR   WPI; 2001-316172/33.
DR   N-PSDB; AAS04498.
XX
PT   Novel growth factor polypeptides termed as FCTRX polypeptides, useful
PT   for treating cancer, cardiovascular and fibrotic diseases, diabetic
PT   ulcers, wound healing and neuronal disorders  -
XX
PS   Disclosure; Fig 13; 171pp; English.
XX
CC   The sequence represents a protein related to bone morphogenetic protein-1
CC   (BMP-1), vascular endothelial growth factor (VEGF-E) and platelet derived
CC   growth factor (PDGF). Polypeptides and polynucleotides related to BMP-1,
CC   VEGF-E and PDGF are referred to as FCTRX peptides and nucleic acids.
CC   FCTRX proteins are useful for treating or preventing a disorder
CC   associated with aberrant expression, aberrant processing, or aberrant
CC   physiological interactions of the proteins in a mammal, where the
CC   disorder is characterised by insufficient or ineffective growth of a cell
CC   or a tissue, e.g. hyperplasia or neoplasia. The peptides and their
CC   associated nucleic acids are useful for both promoting and inhibiting
CC   growth of cells and tissues and in treatment of cancer, anaemia,
CC   leukopenia, baldness, for treating cardiovascular and fibrotic disorders,
CC   diabetic ulcers, obesity, infectious diseases, hyperproliferative and
CC   dysproliferative disorders, neurodegenerative disorders, osteoarthritis,
CC   inflammatory disorders, Graft versus host disease, coagulation disorders
CC   such as haemophilia, and neural disorders including Parkinson's disease,
CC   Alzheimer's disease, multiple sclerosis, Huntington's disease,
CC   amyotrophic lateral sclerosis, peripheral neuropathy, acute brain injury
CC   and epilepsy.
XX
SQ   Sequence   370 AA;

  Query Match             100.0%;  Score 1994;  DB 22;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370
```

```
RESULT 8
AAE00999
ID   AAE00999 standard; Protein; 370 AA.
XX
AC   AAE00999;
XX
DT   04-JUL-2001  (first entry)
XX
DE   Human Zvegf4 protein which forms heteromultimer with Zvegf3 protein.
XX
KW   Human; Zvegf3 antagonist; cell proliferation; stellate cell activation;
KW   extracellular matrix production; fibrosis; VEGF-R; PDGF-C;
KW   platelet-derived growth factor; PDGF; vascular endothelial growth factor;
KW   VEGF; mitogenic effect; therapy; keloid; scleroderma; fibrotic disorder;
KW   chronic active hepatitis; fulminant viral hepatitis; amyloidosis;
KW   diabetic nephropathy; alpha-1-antitrypsin deficiency; silicosis;
KW   asbestosis; renal arteriosclerosis; post necrotic cirrhosis;
KW   diabetic glomerulosclerosis; focal glomerulosclerosis; hyperostosis;
KW   pulmonary hypertension; idiopathic pulmonary fibrosis; osteopetrosis;
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KW   bronchiolitis obliterans-organising pneumonia; transplant vasculopathy;
KW   fibroproliferative disorder; Zvegf4 protein.
XX
OS   Homo sapiens.
XX
PN   WO200128586-A1.
XX
PD   26-APR-2001.
XX
PF   23-OCT-2000; 2000WO-US29270.
XX
PR   21-OCT-1999;   99US-0161653.
PR   12-NOV-1999;   99US-0165255.
PR   01-AUG-2000; 2000US-0222223.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gilbertson DG;
XX
DR   WPI; 2001-300278/31.
XX
PT   Use of zvegf3 antagonist for reducing fibroproliferative disorder of
PT   kidney, liver and bone, reducing extracellular matrix production,
PT   treating fibrosis or reducing stellate cell activation in mammal -
XX
PS   Disclosure; Page 62-63; 70pp; English.
XX
CC   The patent discloses materials and methods for reducing cell
CC   proliferation or extracellular matrix production, treating fibrosis and
CC   reducing stellate cell activation in a mammal. The method comprises
CC   administering a composition containing a Zvegf3 antagonist in combination
CC   with a delivery vehicle. The Zvegf3 is a protein that is structurally
CC   related to platelet-derived growth factor (PDGF) and the vascular
CC   endothelial growth factors (VEGF). The Zvegf3 protein is also designated
CC   as "VEGF-R" and "PDGF-C". The Zvegf3 antagonist is useful to block the
CC   mitogenic effects of zvegf3 and thereby to inhibit or prevent and treat
CC   keloids, scleroderma, fibrotic disorders of liver such as chronic active
CC   hepatitis, fulminant viral hepatitis, post necrotic cirrhosis and
CC   alpha-1-antitrypsin deficiency, fibrotic disorders of the kidney such as
CC   diabetic glomerulosclerosis, focal glomerulosclerosis, diabetic
CC   nephropathy, amyloidosis and renal arteriosclerosis, fibrotic disorders
CC   of the lung such as silicosis, asbestosis, idiopathic pulmonary fibrosis,
CC   bronchiolitis obliterans-organising pneumonia and pulmonary hypertension,
CC   fibrotic disorders of pancreas, fibroproliferative disorders of the
CC   vasculature such as transplant vasculopathy and fibroproliferative
CC   disorders of the bone such as osteopetrosis and hyperostosis. The
CC   present sequence is human Zvegf4 protein which forms a heteromultimer
CC   with Zvegf3 protein.
XX
SQ   Sequence   370 AA;

  Query Match            100.0%;  Score 1994;  DB 22;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 9
AAB60888
ID   AAB60888 standard; protein; 370 AA.
XX
AC   AAB60888;
XX
DT   02-APR-2001  (first entry)
XX
DE   Human VEGF-G protein.
XX
KW   Vascular endothelial growth factor; VEGF; cancer; cell;
KW   angiogenesis.
XX
OS   Homo sapiens.
XX
PN   WO200100878-A2.
XX
PD   04-JAN-2001.
XX
PF   29-JUN-2000; 2000WO-US18085.
XX
PR   30-JUN-1999;   99US-0343671.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Gearing DP;
XX
DR   WPI; 2001-050129/06.
XX
PT   New vascular endothelial growth factor family member used for diagnosis
PT   and treatment of deregulated cell growth e.g. cancer, disorders
PT   involving aberrant angiogenesis e.g. psoriasis, and chronic
PT   inflammatory diseases -
XX
PS   Claim 2; Fig 1; 142pp; English.
XX
CC   The present invention relates to a vascular endothelial growth factor
CC   (VEGF) family member, VEGF-G. VEGF-G protein and nucleic acid
CC   molecules are used as modulating agents or as targets for
CC   developing modulating agents to regulate a variety of cellular
CC   processes e.g. cell proliferation, differentiation, migration and
CC   wound repair. VEGF-G modulators, i.e. VEGF-G protein, peptide,
CC   peptidomimetic or nucleic acid are used to treat a subject with
CC   aberrant VEGF-G protein or nucleic acid expression or activity
CC   e.g. deregulated cell growth, such as cancer, hyperptrophic bone
CC   disorders, disorders involving aberrant angiogenesis e.g. psoriasis,
CC   and chronic inflammatory diseases e.g. rheumatoid arthritis. VEGF-G
CC   gene expression is inhibited through the administration of antisense
CC   molecules or ribozymes and by targeting the regulatory region of VEGF-G
CC   to prevent transcription of the gene in target cells.
XX
SQ   Sequence   370 AA;

  Query Match            100.0%;  Score 1994;  DB 22;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
```

```
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
                 ||||||||||
Db        361 DCICSSRPPR 370
```

RESULT 10
ABP51640
ID ABP51640 standard; Protein; 370 AA.
XX
AC ABP51640;
XX
DT 30-SEP-2002 (first entry)
XX
DE Human zvegf4 protein SEQ ID NO:2.
XX
KW Human; zvegf4; cell proliferation; extracellular matrix production;
KW fibroproliferative disorder; PDGF-D; platelet derived growth factor;
KW PDGF; vascular endothelial growth factor; VEGF; cytostatic; nephrotropic;
KW hepatotropic; antiinflammatory; osteopathic; antiarthritic; metastasis;
KW prostate tumour; prostate cancer; glomerulonephritis; lupus nephritis;
KW diabetic glomerulosclerosis; renal arteriosclerosis; nephrotic syndrome;
KW chronic active hepatitis; cirrhosis; osteopetrosis; osteosclerosis;
KW hyperostosis; osteoarthritis.
XX
OS Homo sapiens.
XX
PN US2002064832-A1.
XX
PD 30-MAY-2002.
XX
PF 14-MAR-2001; 2001US-0808972.
XX
PR 03-MAY-1999; 99US-132250P.
PR 10-NOV-1999; 99US-164463P.
PR 04-FEB-2000; 2000US-180169P.
PR 26-SEP-2000; 2000US-235295P.
PR 03-MAY-2000; 2000US-0564595.
XX
PA (HART/) HART C E.
PA (TOPO/) TOPOUZIS S.
PA (GILB/) GILBERTSON D G.
XX
PI Hart CE, Topouzis S, Gilbertson DG;
XX
DR WPI; 2002-573696/61.
DR N-PSDB; ABQ73239.
XX
PT Reducing proliferation or extracellular matrix production by a cell in
PT a mammal, useful for treating fibroproliferative disorders of bone,
PT liver and kidney, comprises administering a zvegf4 antagonist -
XX
PS Example 3; Page 19-20; 34pp; English.
XX
CC The present invention describes a method for reducing proliferation of
CC or extracellular matrix production by a cell in a mammal. The method
CC comprises administering to the mammal a composition comprising a
CC therapeutically effective amount of a zvegf4 antagonist chosen from
CC anti-zvegf4 antibodies, inhibitory polynucleotides, inhibitors of
CC zvegf4 activation, and mitogenically inactive, receptor-binding variants
CC of zvegf4. Zvegf4 (also called PDGF-D) is a multi-domain protein that is
CC structurally related to platelet derived growth factor (PDGF) and
CC vascular endothelial growth factors (VEGF). Zvegf4 has cytostatic,
CC nephrotropic, hepatotropic, antiinflammatory, osteopathic and
CC antiarthritic activities. The method is useful for reducing proliferation
CC of mesangial, epithelial, endothelial, smooth muscle, fibroblast,
CC osteoblast, osteoclast, neuronal, stromal, stellate or interstitial cells
CC in a mammal, in particular proliferation of prostate tumour cells, and
CC for reducing extracellular matrix production by a cell in a mammal
CC suffering from a fibroproliferative disorder of kidney, bone or liver.
CC In particular it is useful for reducing stellate cell activation. The
CC method is useful for reducing metastasis of prostate cancer cells to
CC bone in a mammal and for treating a fibroproliferative disorder of
CC kidney, liver or bone in a mammal. Fibroproliferative disorders of the
CC kidney include, glomerulonephritis, diabetic glomerulosclerosis, lupus
CC nephritis, renal arteriosclerosis and nephrotic syndrome, disorders of
CC the liver include chronic active hepatitis and many other types of
CC cirrhosis, and disorders of the bone include osteopetrosis, hyperostosis,
CC osteosclerosis, osteoarthritis, and ectopic bone formation in metastatic
CC prostate cancer. The present sequence represents human zvegf4, which is
CC used in an example from the present invention.
XX
SQ Sequence 370 AA;

Query Match 100.0%; Score 1994; DB 23; Length 370;
Best Local Similarity 100.0%; Pred. No. 1.1e-188;
Matches 370; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370
```

RESULT 11
ABG64733
ID ABG64733 standard; Protein; 370 AA.
XX
AC ABG64733;
XX
DT 27-AUG-2002 (first entry)
XX
DE Human albumin fusion protein #1408.
XX
KW Albumin fusion protein; therapeutic protein X; human albumin; HA;

```
KW   human serum albumin; HSA; cancer; reproductive disorder;
KW   digestive disorder; immune disorder; endocrine disorder;
KW   haematopoiêtic disorder; neural disorder; connective disorder;
KW   cytostatic; antiinfertility; antiinflammatory; antiulcer;
KW   immunomodulator; anti-HIV; antidiabetic; haemostatic; nootropic;
KW   neuroprotective; antiparkinsonian; antimicrobial; neuroleptic;
KW   osteopathic; antiarthritic.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200177137-A1.
XX
PD   18-OCT-2001.
XX
PF   12-APR-2001; 2001WO-US11988.
XX
PR   12-APR-2000; 2000US-229358P.
PR   25-APR-2000; 2000US-199384P.
PR   21-DEC-2000; 2000US-256931P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Haseltine WA;
XX
DR   WPI; 2002-010886/01.
XX
PT   New fusion protein for treating disease e.g. diabetes comprises an
PT   albumin fused to a therapeutic protein -
XX
PS   Claim 1; Page 1459-1460; 2102pp; English.
XX
CC   The present invention relates to albumin fusion proteins comprising a
CC   therapeutic protein X and human albumin (HA, also known as human serum
CC   albumin, HSA). The proteins are useful for treating a disease or
CC   disorder that may be modulated by therapeutic protein X. The albumin
CC   extends the shelf-life of protein X, and may increase its biological
CC   in vitro/in vivo activity. The protein is useful for treating and
CC   diagnosing disorders such as cancer, reproductive disorders, digestive
CC   disorders (e.g. Crohn's disease, ulcerative colitis), immune disorders
CC   (e.g. acquired immunodeficiency syndrome, AIDS), endocrine disorders
CC   (e.g. diabetes), haematopoietic disorders, neural disorders
CC   (e.g. Alzheimer's, Parkinson's, Creutzfeldt-Jacob disease,
CC   encephalomyelitis, meningitis, schizophrenia), and connective disorders
CC   (e.g. osteoporosis, arthritis). ABG63326-ABG65518 represent albumin
CC   fusion proteins of the invention.
XX
SQ   Sequence   370 AA;

  Query Match             100.0%;  Score 1994;  DB 23;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 12
AAB47891
ID   AAB47891 standard; Protein; 370 AA.
XX
AC   AAB47891;
XX
DT   16-MAY-2002  (first entry)
XX
DE   Human zvegf4.
XX
KW   Human; mouse; zvegf3; zvegf4; platelet derived growth factor;
KW   PDGF; homolog; growth; bone; ligament; cartilage; proliferation;
KW   osteoblast; chondrocyte; bony defect; fracture; bone graft;
KW   implant; periodontal pocket; osteoclast; bone marrow stem cell;
KW   osteoporosis.
XX
OS   Homo sapiens.
XX
PN   US2002004225-A1.
XX
PD   10-JAN-2002.
XX
PF   29-MAR-2001; 2001US-0823033.
XX
PR   07-DEC-1998;   98US-111173P.
PR   06-JUL-1999;   99US-142576P.
PR   21-OCT-1999;   99US-161653P.
PR   12-NOV-1999;   99US-165255P.
PR   31-MAR-2000; 2000US-193723P.
PR   07-DEC-1999;   99US-0457066.
XX
PA   (HART/) HART C E.
PA   (GILB/) GILBERTSON D G.
XX
PI   Hart CE,  Gilbertson DG;
XX
DR   WPI; 2002-171026/22.
XX
PT   Promoting growth of bone, ligament or cartilage in a mammal, involves
PT   administering to the mammal a protein which comprises growth factor
PT   domain of zvegf3 protein, a homolog of platelet-derived growth factor
PT   -
XX
PS   Claim 8; Page 20-21; 31pp; English.
XX
CC   This sequences represents human zvegf4.  zvegf4 can be used in a
CC   composition with either human or mouse zvegf3, for promoting growth of
CC   bone, ligament or cartilage and stimulating proliferation of osteoblasts
CC   or chondrocytes in a mammal. zvegf3 is a platelet derived growth factor
CC   (PDGF) homolog.  The zvegf3 protein used was preferably a dimeric
CC   protein of residues 235-345 of human zvegf3 or all of the mouse zvegf3
CC   protein, with a delivery vehicle. The method of th invention is useful
CC   for promoting growth of bone, ligament or cartilage in a mammal, where
CC   the composition is administered at a site of a bony defect, preferably
CC   a fracture, bone graft site, implant site, or periodontal pocket, and
CC   for stimulating proliferation of osteoblasts or chondrocytes in a
CC   mammal. It is further useful for promoting proliferation of osteoblasts,
CC   osteoclasts, chondrocytes or bone marrow stem cells, where the bone
CC   marrow stem cells are harvested from a patient prior to culture. The
CC   method is therefore useful for treating osteoporosis.
XX
SQ   Sequence   370 AA;

  Query Match             100.0%;  Score 1994;  DB 23;  Length 370;
```

```
  Best Local Similarity   100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 13
AAE15819
ID   AAE15819 standard; Protein; 370 AA.
XX
AC   AAE15819;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Human LP85 protein #1.
XX
KW   LP85; platelet-derived growth factor; PDGF; antiinflammatory; vulnerary;
KW   osteopathic; neuroprotective; tranquilliser; musculoskeletal disorder;
KW   MSD; therapy; bone growth; cartilage differentiation; wound healing;
KW   neuron growth; bone fracture; osteoporosis; osteopenia; arthritis;
KW   sarcopenia; periodontal disease; tissue atrophy; endocrine disorder;
KW   muscle loss; immobility; bone density.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..12
FT                   /label= Signal_peptide
FT   Protein         13..370
FT                   /label= Human_mature_LP85_protein
XX
PN   WO200189450-A2.
XX
PD   29-NOV-2001.
XX
PF   08-MAY-2001; 2001WO-US11755.
XX
PR   19-MAY-2000; 2000US-205424P.
PR   11-JAN-2001; 2001US-261071P.
PR   11-JAN-2001; 2001US-261076P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Beals JM,  Gonzalez-Dewhitt PA,  Hammond LJ,  Lu J,  Na S,  Su EW;
PI   Witcher DR,  Wroblewski VJ;
XX
DR   WPI; 2002-083040/11.
DR   N-PSDB; AAD15819.
XX
PT   Analog of a platelet-derived growth factor homolog, LP85 useful for
PT   treating osteoporosis, arthritis, sarcopenia, wounds, has one or more
PT   amino acid substitutions which destroy the tripeptidyl sequence of
PT   native LP85  -
XX
PS   Claim 11; Page 109-110; 117pp; English.
XX
CC   The present invention relates to LP85, an analogue of platelet-derived
CC   growth factor (PDGF) homologue. Sequences of the invention are useful
CC   for the manufacture of a medicament for treating musculoskeletal disorder
CC   (MSD) which include promoting bone growth, cartilage differentiation and
CC   function, wound healing, neuron growth, preventing cartilage degradation
CC   or neuronal degeneration. They are useful for treating bone fractures,
CC   osteoporosis, osteopenia, arthritis, sarcopenia, periodontal disease,
CC   tissue atrophy, traumatised connective tissues, grafted connective
CC   tissues and/or transplanted organs, bone or muscle loss due to
CC   malignancy, endocrine disorders and immobility. They are also used
CC   for prophylactically increasing or maintaining bone density in a
CC   mammal. The present sequence is human LP85 protein.
XX
SQ   Sequence   370 AA;

  Query Match             100.0%;  Score 1994;  DB 23;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 1.1e-188;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 14
AAE15845
ID   AAE15845 standard; Protein; 370 AA.
XX
AC   AAE15845;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Human LP85 mutant protein (N276D).
XX
KW   LP85; platelet-derived growth factor; PDGF; antiinflammatory; vulnerary;
KW   osteopathic; neuroprotective; tranquilliser; musculoskeletal disorder;
KW   MSD; therapy; bone growth; cartilage differentiation; wound healing;
KW   neuron growth; bone fracture; osteoporosis; osteopenia; arthritis;
KW   sarcopenia; periodontal disease; tissue atrophy; endocrine disorder;
KW   muscle loss; immobility; bone density; mutant; mutein.
```

```
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 276
FT                   /note= "Wild type Asn substituted with Asp"
XX
PN   WO200189450-A2.
XX
PD   29-NOV-2001.
XX
PF   08-MAY-2001; 2001WO-US11755.
XX
PR   19-MAY-2000; 2000US-205424P.
PR   11-JAN-2001; 2001US-261071P.
PR   11-JAN-2001; 2001US-261076P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Beals JM,  Gonzalez-Dewhitt PA,  Hammond LJ,  Lu J,  Na S,  Su EW;
PI   Witcher DR,  Wroblewski VJ;
XX
DR   WPI; 2002-083040/11.
XX
PT   Analog of a platelet-derived growth factor homolog, LP85 useful for
PT   treating osteoporosis, arthritis, sarcopenia, wounds, has one or more
PT   amino acid substitutions which destroy the tripeptidyl sequence of
PT   native LP85  -
XX
PS   Claim 15b; Page -; 117pp; English.
XX
CC   The present invention relates to LP85, an analogue of platelet-derived
CC   growth factor (PDGF) homologue. Sequences of the invention are useful
CC   for the manufacture of a medicament for treating musculoskeletal disorder
CC   (MSD) which include promoting bone growth, cartilage differentiation and
CC   function, wound healing, neuron growth, preventing cartilage degradation
CC   or neuronal degeneration. They are useful for treating bone fractures,
CC   osteoporosis, osteopenia, arthritis, sarcopenia, periodontal disease,
CC   tissue atrophy, traumatised connective tissues, grafted connective
CC   tissues and/or transplanted organs, bone or muscle loss due to
CC   malignancy, endocrine disorders and immobility. They are also used
CC   for prophylactically increasing or maintaining bone density in a
CC   mammal. The present sequence is human LP85 mutant protein (N276D).
CC   Note: This sequence is not shown in the specification but is derived
CC   from human LP85 protein shown in pages 109-110 of the specification
CC   (AAE15819).
XX
SQ   Sequence   370 AA;

  Query Match             99.7%;  Score 1989;  DB 23;  Length 370;
  Best Local Similarity   99.7%;  Pred. No. 3.5e-188;
  Matches  369;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
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Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||:|||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRDYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 15
AAE15849
ID   AAE15849 standard; Protein; 370 AA.
XX
AC   AAE15849;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Human LP85 mutant protein (N276S).
XX
KW   LP85; platelet-derived growth factor; PDGF; antiinflammatory; vulnerary;
KW   osteopathic; neuroprotective; tranquilliser; musculoskeletal disorder;
KW   MSD; therapy; bone growth; cartilage differentiation; wound healing;
KW   neuron growth; bone fracture; osteoporosis; osteopenia; arthritis;
KW   sarcopenia; periodontal disease; tissue atrophy; endocrine disorder;
KW   muscle loss; immobility; bone density; mutant; mutein.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 276
FT                   /note= "Wild type Asn substituted with Ser"
XX
PN   WO200189450-A2.
XX
PD   29-NOV-2001.
XX
PF   08-MAY-2001; 2001WO-US11755.
XX
PR   19-MAY-2000; 2000US-205424P.
PR   11-JAN-2001; 2001US-261071P.
PR   11-JAN-2001; 2001US-261076P.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Beals JM,  Gonzalez-Dewhitt PA,  Hammond LJ,  Lu J,  Na S,  Su EW;
PI   Witcher DR,  Wroblewski VJ;
XX
DR   WPI; 2002-083040/11.
XX
PT   Analog of a platelet-derived growth factor homolog, LP85 useful for
PT   treating osteoporosis, arthritis, sarcopenia, wounds, has one or more
PT   amino acid substitutions which destroy the tripeptidyl sequence of
PT   native LP85  -
XX
PS   Claim 15f; Page -; 117pp; English.
XX
CC   The present invention relates to LP85, an analogue of platelet-derived
CC   growth factor (PDGF) homologue. Sequences of the invention are useful
CC   for the manufacture of a medicament for treating musculoskeletal disorder
CC   (MSD) which include promoting bone growth, cartilage differentiation and
CC   function, wound healing, neuron growth, preventing cartilage degradation
CC   or neuronal degeneration. They are useful for treating bone fractures,
CC   osteoporosis, osteopenia, arthritis, sarcopenia, periodontal disease,
CC   tissue atrophy, traumatised connective tissues, grafted connective
CC   tissues and/or transplanted organs, bone or muscle loss due to
CC   malignancy, endocrine disorders and immobility. They are also used
CC   for prophylactically increasing or maintaining bone density in a
CC   mammal. The present sequence is human LP85 mutant protein (N276S).
CC   Note: This sequence is not shown in the specification but is derived
CC   from human LP85 protein shown in pages 109-110 of the specification
CC   (AAE15819).
```

XX
SQ Sequence 370 AA;

Query Match 99.7%; Score 1989; DB 23; Length 370;
Best Local Similarity 99.7%; Pred. No. 3.5e-188;
Matches 369; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||:||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRSYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370
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Search completed: June 12, 2003, 15:29:58
Job time : 51 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: June 12, 2003, 15:28:35 ; Search time 26 Seconds
(without alignments)
418.711 Million cell updates/sec

Title: US-09-662-783-2
Perfect score: 1994
Sequence: 1 MHRLIFVYTLICANFCSCRD.....DIQLDHHERCDCICSSRPPR 370

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1994	100.0	370	4	US-09-457-066-37	Sequence 37, Appl
2	1994	100.0	370	4	US-09-540-224-2	Sequence 2, Appli
3	1737	87.1	370	4	US-09-540-224-4	Sequence 4, Appli
4	752	37.7	345	4	US-09-457-066-43	Sequence 43, Appl
5	742.5	37.2	345	4	US-09-040-220D-2	Sequence 2, Appli
6	742.5	37.2	345	4	US-09-457-066-2	Sequence 2, Appli
7	742.5	37.2	345	4	US-09-265-686-2	Sequence 2, Appli
8	742.5	37.2	345	4	US-09-540-224-5	Sequence 5, Appli
9	187.5	9.4	788	1	US-08-572-225-1	Sequence 1, Appli
10	186.5	9.4	730	4	US-08-872-757-2	Sequence 2, Appli
11	180.5	9.1	101	4	US-09-374-135-6	Sequence 6, Appli
12	174.5	8.8	986	4	US-08-872-757-4	Sequence 4, Appli
13	172.5	8.7	591	3	US-08-991-408-4	Sequence 4, Appli
14	172.5	8.7	591	4	US-09-432-473-4	Sequence 4, Appli
15	172.5	8.7	1013	2	US-08-866-650-5	Sequence 5, Appli
16	172.5	8.7	1013	2	US-09-021-287-5	Sequence 5, Appli
17	172.5	8.7	1013	3	US-08-991-408-2	Sequence 2, Appli
18	172.5	8.7	1013	4	US-09-240-473-5	Sequence 5, Appli
19	172.5	8.7	1013	4	US-09-432-473-2	Sequence 2, Appli
20	167.5	8.4	103	4	US-09-374-135-5	Sequence 5, Appli
21	167	8.4	922	4	US-09-116-473-4	Sequence 4, Appli
22	166.5	8.4	1013	2	US-08-866-650-3	Sequence 3, Appli
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28	157	7.9	901	3	US-08-936-135-22	Sequence 22, Appl
29	157	7.9	906	3	US-08-936-135-24	Sequence 24, Appl
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31	157	7.9	909	3	US-08-936-135-10	Sequence 10, Appl
32	157	7.9	914	3	US-08-936-135-12	Sequence 12, Appl
33	157	7.9	925	4	US-09-116-473-2	Sequence 2, Appli
34	157	7.9	926	3	US-08-936-135-14	Sequence 14, Appl
35	157	7.9	931	3	US-08-936-135-16	Sequence 16, Appl
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37	142	7.1	101	4	US-09-374-135-4	Sequence 4, Appli
38	138	6.9	25	4	US-09-540-224-8	Sequence 8, Appli
39	136.5	6.8	449	2	US-08-839-008-9	Sequence 9, Appli
40	135.5	6.8	102	4	US-09-374-135-7	Sequence 7, Appli
41	131	6.6	666	4	US-09-341-587-1	Sequence 1, Appli
42	130.5	6.5	401	2	US-08-839-008-5	Sequence 5, Appli
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45	130.5	6.5	468	2	US-08-839-008-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1
US-09-457-066-37
; Sequence 37, Application US/09457066
; Patent No. 6432673
; GENERAL INFORMATION:
; APPLICANT: Gao, Zeren
; APPLICANT: Hart, Charles E.
; APPLICANT: Piddington, Christopher S.
; APPLICANT: Sheppard, Paul O.
; APPLICANT: Shoemaker, Kimberly E.
; APPLICANT: Gilbertson, Debra G.
; APPLICANT: West, James W.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF3
; FILE REFERENCE: 98-60
; CURRENT APPLICATION NUMBER: US/09/457,066
; CURRENT FILING DATE: 1999-12-07
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 370
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-457-066-37

Query Match 100.0%; Score 1994; DB 4; Length 370;
Best Local Similarity 100.0%; Pred. No. 4.7e-198;
Matches 370; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
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Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
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Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
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Db        361 DCICSSRPPR 370


RESULT 2
US-09-540-224-2
; Sequence 2, Application US/09540224
; Patent No. 6468543
; GENERAL INFORMATION:
;  APPLICANT: Gilbertson, Debra G.
;  APPLICANT: Hart, Charles E.
;  TITLE OF INVENTION: METHODS FOR PROMOTING GROWTH OF BONE,
;  TITLE OF INVENTION: LIGAMENT AND CARTILAGE USING ZVEGF4
;  FILE REFERENCE: 00-28
;  CURRENT APPLICATION NUMBER: US/09/540,224
;  CURRENT FILING DATE: 2000-03-31
;  EARLIER APPLICATION NUMBER: US 60/180,169
;  EARLIER FILING DATE: 2000-02-04
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;    LENGTH: 370
;    TYPE: PRT
;    ORGANISM: Homo sapiens
US-09-540-224-2

  Query Match            100.0%;  Score 1994;  DB 4;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 4.7e-198;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
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Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
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Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
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Db        361 DCICSSRPPR 370


RESULT 3
US-09-540-224-4
; Sequence 4, Application US/09540224
; Patent No. 6468543
; GENERAL INFORMATION:
;  APPLICANT: Gilbertson, Debra G.
;  APPLICANT: Hart, Charles E.
;  TITLE OF INVENTION: METHODS FOR PROMOTING GROWTH OF BONE,
;  TITLE OF INVENTION: LIGAMENT AND CARTILAGE USING ZVEGF4
;  FILE REFERENCE: 00-28
;  CURRENT APPLICATION NUMBER: US/09/540,224
;  CURRENT FILING DATE: 2000-03-31
;  EARLIER APPLICATION NUMBER: US 60/180,169
;  EARLIER FILING DATE: 2000-02-04
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;    LENGTH: 370
;    TYPE: PRT
;    ORGANISM: Mus musculus
US-09-540-224-4

  Query Match            87.1%;  Score 1737;  DB 4;  Length 370;
  Best Local Similarity  85.1%;  Pred. No. 2e-171;
  Matches  315;  Conservative   25;  Mismatches   30;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              | ||: |  |:||||    || |||| ||||||||||||||||||||||:|:| |||
Db          1 MQRLVLVSILLCANFSCYPDTFATPQRASIKALRNANLRRDESNHLTDLYQREENIQVTS 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
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Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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Db        121 ESSTVVRGRWCGHKEIPPRITSRTNQIKITFKSDDYFVAKPGFKIYYSFVEDFQPEAASE 180

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Db        241 LDTPHYRGRSYHDRKSKVDLDRLNDDVKRYSCTPRNHSVNLREELKLTNAVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              |||||||||||||:||||:||||||||||||:||||| ||||:|| ||||||||||||||
Db        301 RCGGNCGCGTVNWKSCTCSSGKTVKKYHEVLKFEPGHFKRRGKAKNMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 4
US-09-457-066-43
; Sequence 43, Application US/09457066
; Patent No. 6432673
; GENERAL INFORMATION:
;  APPLICANT: Gao, Zeren
;  APPLICANT: Hart, Charles E.
;  APPLICANT: Piddington, Christopher S.
;  APPLICANT: Sheppard, Paul O.
;  APPLICANT: Shoemaker, Kimberly E.
;  APPLICANT: Gilbertson, Debra G.
;  APPLICANT: West, James W.
;  TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF3
;  FILE REFERENCE: 98-60
;  CURRENT APPLICATION NUMBER: US/09/457,066
;  CURRENT FILING DATE: 1999-12-07
;  NUMBER OF SEQ ID NOS: 50
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 43
;    LENGTH: 345
;    TYPE: PRT
;    ORGANISM: Mus musculus
US-09-457-066-43

  Query Match            37.7%;  Score 752;  DB 4;  Length 345;
  Best Local Similarity  45.3%;  Pred. No. 1.8e-69;
  Matches  148;  Conservative   59;  Mismatches   92;  Indels   28;  Gaps    9;

Qy         42 ESNHLTDLYRRDETIQVKGNGYVQSPRFPNSYPRNLLLTWRLHS-QENTRIQLVFDNQFG 100
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Db         37 EQNGVQD-PRHERVVTISGNGSIHSPKFPHTYPRNMVLVWRLVAVDENVRIQLTFDERFG 95

Qy        101 LEEAENDICRYDFVEVEDISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAK 160

Db         96 LEDPEDDICKYDFVEVEEPSDGSVL--GRWCGSGTVPGKQTSKGNHIRIRFVSDEYFPSE 153

Qy        161 PGFKIYYSLLEDFQPAAASETNWESVTSSISGVSYNSPSVTDP-TLIADALDKKIAEFDT 219

Db        154 PGFCIHYSII---MPQVTETT--------------SPSVLPPSSLSLDLLNNAVTAFST 195

Qy        220 VEDLLKYFNPESWQEDLENMYLDTPRYRGRSY-HDRKSK-VDLLDRLNDDAKRYSCTPRNY 277

Db        196 LEELIRYLEPDRWQVDLDSLYKPTWQLLGKAFLYGKKSKVVNLNLLKEEVKLYSCTPRNF 255

Qy        278 SVNIREELKLANVVFFPRCLLVQRCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGH 337

Db        256 SVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPRKVTKKYHEVLQLRP-- 313

Qy        338 IKRRGRAKTMALVDIQLDHHERCDCIC 364

Db        314 -KTGVKGLHKSLTDVALEHHEECDCVC 339


RESULT 5
US-09-040-220D-2
; Sequence 2, Application US/09040220D
; Patent No. 6391311
; GENERAL INFORMATION:
;  APPLICANT: Ferrara, Napoleone
;  APPLICANT:  Kuo, Sophia S.
;  TITLE OF INVENTION: NOVEL POLYPEPTIDES HAVING HOMOLOGY TO VASCULAR
;  TITLE OF INVENTION:  ENDOTHELIAL CELL GROWTH FACTOR AND BONE MORPHOGENETIC
;  TITLE OF INVENTION:  PROTEIN 1 AND NUCLEIC ACIDS ENCODING SAME, THEIR USES,
;  TITLE OF INVENTION:  AND PROCESSES FOR THEIR PRODUCTION
;  FILE REFERENCE: P1122
;  CURRENT APPLICATION NUMBER: US/09/040,220D
;  CURRENT FILING DATE:  1998-03-17
;  NUMBER OF SEQ ID NOS: 8
; SEQ ID NO 2
;   LENGTH: 345
;   TYPE: PRT
;   ORGANISM: Human
US-09-040-220D-2

  Query Match             37.2%;  Score 742.5;  DB 4;  Length 345;
  Best Local Similarity   43.6%;  Pred. No. 1.8e-68;
  Matches  159;  Conservative   59;  Mismatches  114;  Indels   33;  Gaps   10;

Qy          5 IFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKGNGYV 64

Db          3 LFGLLLLTSALAGQRQGTQAESNLSSKFQFSSN---KEQNGVQD-PQHERIITVSTNGSI 58

Qy         65 QSPRFPNSYPRNLLLTWRLHS-QENTRIQLVFDNQFGLEEAENDICRYDFVEVEDISETS 123

Db         59 HSPRFPHTYPRNTVLVWRLVAVEENVWIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGT 118

Qy        124 TIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSL-LEDFQPAAASETN 182

Db        119 --ILGRWCGSGTVPGKQISKGNQIRIRFVSDEYFPSEPGFCIHYNIVMPQFTEAV----- 171

Qy        183 WESVTSSISGVSYNSPSVTDPT-LIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMYL 241

Db        172 -------------SPSVLPPSALPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYR 217

Qy        242 DTPRYRGRSY-HDRKSK-VDLLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLV 299

Db        218 PTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLV 277

Qy        300 QRCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHER 359

Db        278 KRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRP---KTGVRGLHKSLTDVALEHHEE 334

Qy        360 CDCIC 364

Db        335 CDCVC 339


RESULT 6
US-09-457-066-2
; Sequence 2, Application US/09457066
; Patent No. 6432673
; GENERAL INFORMATION:
;  APPLICANT: Gao, Zeren
;  APPLICANT: Hart, Charles E.
;  APPLICANT: Piddington, Christopher S.
;  APPLICANT: Sheppard, Paul O.
;  APPLICANT: Shoemaker, Kimberly E.
;  APPLICANT: Gilbertson, Debra G.
;  APPLICANT: West, James W.
;  TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF3
;  FILE REFERENCE: 98-60
;  CURRENT APPLICATION NUMBER: US/09/457,066
;  CURRENT FILING DATE: 1999-12-07
;  NUMBER OF SEQ ID NOS: 50
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 345
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-457-066-2

  Query Match             37.2%;  Score 742.5;  DB 4;  Length 345;
  Best Local Similarity   43.6%;  Pred. No. 1.8e-68;
  Matches  159;  Conservative   59;  Mismatches  114;  Indels   33;  Gaps   10;

Qy          5 IFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKGNGYV 64

Db          3 LFGLLLLTSALAGQRQGTQAESNLSSKFQFSSN---KEQNGVQD-PQHERIITVSTNGSI 58

Qy         65 QSPRFPNSYPRNLLLTWRLHS-QENTRIQLVFDNQFGLEEAENDICRYDFVEVEDISETS 123

Db         59 HSPRFPHTYPRNTVLVWRLVAVEENVWIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGT 118

Qy        124 TIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSL-LEDFQPAAASETN 182

Db        119 --ILGRWCGSGTVPGKQISKGNQIRIRFVSDEYFPSEPGFCIHYNIVMPQFTEAV----- 171

Qy        183 WESVTSSISGVSYNSPSVTDPT-LIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMYL 241

Db        172 -------------SPSVLPPSALPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYR 217

Qy        242 DTPRYRGRSY-HDRKSK-VDLLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLV 299

Db        218 PTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLV 277

Qy        300 QRCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHER 359

Db        278 KRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRP---KTGVRGLHKSLTDVALEHHEE 334

Qy        360 CDCIC 364

Db        335 CDCVC 339


RESULT 7
US-09-265-686-2
; Sequence 2, Application US/09265686
; Patent No. 6455283
; GENERAL INFORMATION:
;  APPLICANT:  Ferrara, Napoleone
;  APPLICANT:  Kuo, Sophia S.
;  TITLE OF INVENTION:  POLYPEPTIDES HOMOLOGOUS TO VEGF AND BMPI
;  FILE REFERENCE:  P1122P2
;  CURRENT APPLICATION NUMBER: US/09/265,686
;  CURRENT FILING DATE:  1999-03-10
```

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;  PRIOR APPLICATION NUMBER:  US 09/040,220
;  PRIOR FILING DATE:  1998-03-17
;  PRIOR APPLICATION NUMBER:  US 09/184,216
;  PRIOR FILING DATE:  1998-11-02
;  NUMBER OF SEQ ID NOS:  8
; SEQ ID NO 2
;   LENGTH: 345
;   TYPE: PRT
;   ORGANISM: Human
US-09-265-686-2

  Query Match           37.2%;  Score 742.5;  DB 4;  Length 345;
  Best Local Similarity   43.6%;  Pred. No. 1.8e-68;
  Matches  159;  Conservative   59;  Mismatches  114;  Indels   33;  Gaps   10;

Qy          5 IFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKGNGYV 64
              :|   |: :     |  :    : | |   ::|    | | : |  : :  | |  || :
Db          3 LFGLLLLTSALAGQRQGTQAESNLSSKFQFSSN---KEQNGVQD-PQHERIITVSTNGSI 58

Qy         65 QSPRFPNSYPRNLLLTWRLHS-QENTRIQLVFDNQFGLEEAENDICRYDFVEVEDISETS 123
              |||||::|||| :| ||| : :||  ||| || :|||| |:|||:|||||||: |: :
Db         59 HSPRFPHTYPRNTVLVWRLVAVEENVWIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGT 118

Qy        124 TIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSL-LEDFQPAAASETN 182
               | |||||   || :  |: |||:| | ||:|| ::||| |:|:: :  |  |
Db        119 --ILGRWCGSGTVPGKQISKGNQIRIRFVSDEYFPSEPGFCIHYNIVMPQFTEAV----- 171

Qy        183 WESVTSSISGVSYNSPSVTDPT-LIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMYL 241
                          ||||  |: |  | |:  |  | |:|||::|  || || |||::|
Db        172 -------------SPSVLPPSALPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYR 217

Qy        242 DTPRYRGRSY-HDRKSK-VDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLV 299
               | :  |:::   |||: |||: | :: : |||||||:||:||||||  : :|:| ||||
Db        218 PTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLV 277

Qy        300 QRCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHER 359
              :|||||| |   |  | |   | ||||||||  |   |   |    :| |: |:|||
Db        278 KRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRP---KTGVRGLHKSLTDVALEHHEE 334

Qy        360 CDCIC 364
              |||:|
Db        335 CDCVC 339


RESULT 8
US-09-540-224-5
; Sequence 5, Application US/09540224
; Patent No. 6468543
; GENERAL INFORMATION:
;  APPLICANT: Gilbertson, Debra G.
;  APPLICANT: Hart, Charles E.
;  TITLE OF INVENTION: METHODS FOR PROMOTING GROWTH OF BONE,
;  TITLE OF INVENTION: LIGAMENT AND CARTILAGE USING ZVEGF4
;  FILE REFERENCE: 00-28
;  CURRENT APPLICATION NUMBER: US/09/540,224
;  CURRENT FILING DATE: 2000-03-31
;  EARLIER APPLICATION NUMBER: US 60/180,169
;  EARLIER FILING DATE: 2000-02-04
;  NUMBER OF SEQ ID NOS: 9
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
;   LENGTH: 345
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-540-224-5

  Query Match           37.2%;  Score 742.5;  DB 4;  Length 345;
  Best Local Similarity   43.6%;  Pred. No. 1.8e-68;
  Matches  159;  Conservative   59;  Mismatches  114;  Indels   33;  Gaps   10;

Qy          5 IFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKGNGYV 64
              :|   |: :     |  :    : | |   ::|    | | : |  : :  | |  || :
Db          3 LFGLLLLTSALAGQRQGTQAESNLSSKFQFSSN---KEQNGVQD-PQHERIITVSTNGSI 58

Qy         65 QSPRFPNSYPRNLLLTWRLHS-QENTRIQLVFDNQFGLEEAENDICRYDFVEVEDISETS 123
              |||||::|||| :| ||| : :||  ||| || :|||| |:|||:|||||||: |: :
Db         59 HSPRFPHTYPRNTVLVWRLVAVEENVWIQLTFDERFGLEDPEDDICKYDFVEVEEPSDGT 118

Qy        124 TIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSL-LEDFQPAAASETN 182
               | |||||   || :  |: |||:| | ||:|| ::||| |:|:: :  |  |
Db        119 --ILGRWCGSGTVPGKQISKGNQIRIRFVSDEYFPSEPGFCIHYNIVMPQFTEAV----- 171

Qy        183 WESVTSSISGVSYNSPSVTDPT-LIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMYL 241
                          ||||  |: |  | |:  |  | |:|||::|  || || |||::|
Db        172 -------------SPSVLPPSALPLDLLNNAITAFSTLEDLIRYLEPERWQLDLEDLYR 217

Qy        242 DTPRYRGRSY-HDRKSK-VDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLV 299
               | :  |:::   |||: |||: | :: : |||||||:||:||||||  : :|:| ||||
Db        218 PTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLV 277

Qy        300 QRCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHER 359
              :|||||| |   |  | |   | ||||||||  |   |   |    :| |: |:|||
Db        278 KRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRP---KTGVRGLHKSLTDVALEHHEE 334

Qy        360 CDCIC 364
              |||:|
Db        335 CDCVC 339


RESULT 9
US-08-572-225-1
; Sequence 1, Application US/08572225
; Patent No. 5807981
;  GENERAL INFORMATION:
;    APPLICANT:  Prockop, Darwin J.
;    APPLICANT:  Hojima, Yoshio
;    APPLICANT:  Li, Shi-Wu
;    APPLICANT:  Sieron, Aleksander
;    APPLICANT:  Brenner, Mitch
;    TITLE OF INVENTION:  RECOMBINANT C-PROTEINASE AND ITS USE FOR
;    TITLE OF INVENTION:  DRUG DEVELOPMENT FOR THE TREATMENT OF DISEASE
;    NUMBER OF SEQUENCES:  24
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Pennie & Edmonds
;      STREET:  1155 Avenue of the Americas
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  U.S.A.
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/572,225
;      FILING DATE:  13-DEC-1995
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Halluin, Albert P.
;      REGISTRATION NUMBER:  25,227
;      REFERENCE/DOCKET NUMBER:  8389-031
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-854-3660
;      TELEFAX:  415-854-3694
;      TELEX:  66141 PENNIE
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  788 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  unknown
;      TOPOLOGY:  unknown
;    MOLECULE TYPE:  protein
US-08-572-225-1

  Query Match           9.4%;  Score 187.5;  DB 1;  Length 788;
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  Best Local Similarity   39.4%;  Pred. No. 2e-10;
  Matches   43;  Conservative   18;  Mismatches   43;  Indels    5;  Gaps    3;

Qy         59 KGNGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVED 118
              | || : || :|  || |    |:| :    || | ||     |   ||:|:|||||
Db        399 KLNGSITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFD---FFETEGNDVCKYDFVEVRS 455

Qy        119 ISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
                  : : |::||  | |  | |: | ::: ||||:  |:| ||| ::
Db        456 GLTADSKLHGKFCG-SEKPEVITSQYNNMRVEFKSDN-TVSKKGFKAHF 502


RESULT 10
US-08-872-757-2
; Sequence 2, Application US/08872757
; Patent No. 6258584
;  GENERAL INFORMATION:
;    APPLICANT:  Prockop, Darwin J.
;    APPLICANT:  Hojima, Yoshio
;    APPLICANT:  Li, Shi-Wu
;    APPLICANT:  Sieron, Aleksander
;    TITLE OF INVENTION:  RECOMBINANT C-PROTEINASE AND
;    TITLE OF INVENTION:  PROCESSES; METHODS AND USES THEREOF
;    NUMBER OF SEQUENCES:  6
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Pennie & Edmonds
;      STREET:  1155 Avenue of the Americas
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  U.S.A.
;      ZIP:  10036-2711
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/872,757
;      FILING DATE:  10-JUN-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/609,187
;      FILING DATE:  01-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Halluin, Albert P.
;      REGISTRATION NUMBER:  25,227
;      REFERENCE/DOCKET NUMBER:  8389-028-999
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-854-3660
;      TELEFAX:  415-854-3694
;      TELEX:  66141 PENNIE
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  730 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-872-757-2

  Query Match             9.4%;  Score 186.5;  DB 4;  Length 730;
  Best Local Similarity   39.4%;  Pred. No. 2.3e-10;
  Matches   43;  Conservative   18;  Mismatches   43;  Indels    5;  Gaps    3;

Qy         59 KGNGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVED 118
              | || : || :|  || |    |:| :    || | ||     |   ||:|:|||||
Db        597 KLNGSITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFD---FFETEGNDVCKYDFVEVRS 653

Qy        119 ISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
                  : : |::||  | |  | |: | ::: ||||:  |:| ||| ::
Db        654 GLTAHSKLHGKFCG-SEKPEVITSQYNNMRVEFKSDN-TVSKKGFKAHF 700


RESULT 11
US-09-374-135-6
; Sequence 6, Application US/09374135
; Patent No. 6277972
; GENERAL INFORMATION:
;  APPLICANT:  Afar, Daniel E.
;  APPLICANT:  Hubert, Rene S.
;  APPLICANT:  Leong, Kahan
;  APPLICANT:  Raitano, Arthur B.
;  APPLICANT:  Saffran, Douglas C.
;  APPLICANT:  Jakobovits, Aya
;  TITLE OF INVENTION:  BPC-1: A SECRETED BRAIN-SPECIFIC PROTEIN EXPRESSED AND
;  TITLE OF INVENTION:  SECRETED BY PROSTATE AND BLADDER CANCER CELLS
;  FILE REFERENCE:  1703-017.US1
;  CURRENT APPLICATION NUMBER: US/09/374,135
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER:  60/095,982
;  PRIOR FILING DATE:  1998-08-10
;  NUMBER OF SEQ ID NOS:  20
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 101
;   TYPE: PRT
;   ORGANISM: Mouse
US-09-374-135-6

  Query Match             9.1%;  Score 180.5;  DB 4;  Length 101;
  Best Local Similarity   38.7%;  Pred. No. 4e-11;
  Matches   41;  Conservative   18;  Mismatches   42;  Indels    5;  Gaps    3;

Qy         62 GYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDISE 121
              | : || :|  || |    |:| :    || | ||     |   ||:|:||||||
Db          1 GSITSPGWPKEYPPNKNCIWQLVAPTQYRISLQFD---FFETEGNDVCKYDFVEVRSGLT 57

Qy        122 TSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
                 : : |::||  | |  | |: | ::: ||||:  |:| ||| ::
Db         58 ADSKLHGKFCG-SEKPEVITSQYNNMRVEFKSDN-TVSKKGFKAHF 101


RESULT 12
US-08-872-757-4
; Sequence 4, Application US/08872757
; Patent No. 6258584
;  GENERAL INFORMATION:
;    APPLICANT:  Prockop, Darwin J.
;    APPLICANT:  Hojima, Yoshio
;    APPLICANT:  Li, Shi-Wu
;    APPLICANT:  Sieron, Aleksander
;    TITLE OF INVENTION:  RECOMBINANT C-PROTEINASE AND
;    TITLE OF INVENTION:  PROCESSES; METHODS AND USES THEREOF
;    NUMBER OF SEQUENCES:  6
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Pennie & Edmonds
;      STREET:  1155 Avenue of the Americas
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  U.S.A.
;      ZIP:  10036-2711
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/872,757
;      FILING DATE:  10-JUN-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/609,187
;      FILING DATE:  01-MAR-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Halluin, Albert P.
;      REGISTRATION NUMBER:  25,227
;      REFERENCE/DOCKET NUMBER:  8389-028-999
```

```
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-854-3660
;      TELEFAX:  415-854-3694
;      TELEX:  66141 PENNIE
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  986 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-872-757-4

  Query Match             8.8%;  Score 174.5;  DB 4;  Length 986;
  Best Local Similarity   37.6%;  Pred. No. 6.5e-09;
  Matches   41;  Conservative   18;  Mismatches   45;  Indels    5;  Gaps    3;

Qy         59 KGNGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVED 118
              | || :    :|  || |    |:| :    || | ||     |   ||:|:||||||
Db        597 KLNGSISRGGWPKEYPPNKNCIWQLVAPTQYRISLQFD---FFETEGNDVCKYDFVEVRS 653

Qy        119 ISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
                : : |::||  | |  | |: | ::: ||||:  |:| ||| ::
Db        654 GLTADSKLHGKFCG-SEKPEVITSQYNNMRVEFKSDN-TVSKKGFKAHF 700


RESULT 13
US-08-991-408-4
; Sequence 4, Application US/08991408
; Patent No. 6008017
;  GENERAL INFORMATION:
;    APPLICANT:  ARLETH, ANTHONY J.
;    APPLICANT:  WILLETTE, ROBERT N.
;    APPLICANT:  ELSHOURBAGY, NABIL A.
;    APPLICANT:  LI, XIAOTONG
;    TITLE OF INVENTION:  HUMAN CARDIAC/BRAIN TOLLOID-LIKE
;    TITLE OF INVENTION:  PROTEIN
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  RATNER & PRESTIA
;      STREET:  P.O. BOX 980
;      CITY:  VALLEY FORGE
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19482
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/991,408
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/034,471
;      FILING DATE:  02-JAN-1997
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  PRESTIA, PAUL F
;      REGISTRATION NUMBER:  23,031
;      REFERENCE/DOCKET NUMBER:  ATG-50038
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610-407-0700
;      TELEFAX:  610-407-0701
;      TELEX:  846169
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  591 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-991-408-4

  Query Match             8.7%;  Score 172.5;  DB 3;  Length 591;
  Best Local Similarity   36.7%;  Pred. No. 4.6e-09;
  Matches   40;  Conservative   25;  Mismatches   39;  Indels    5;  Gaps    4;

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Qy        119 ISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
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Db        259 GLSSESKLHGKFCG-AEVPEVITSQFNNMRIEFKSDN-TVSKKGFKAHF 305


RESULT 14
US-09-432-473-4
; Sequence 4, Application US/09432473
; Patent No. 6365715
; GENERAL INFORMATION:
;  APPLICANT: ARLETH, ANTHONY J.
;  APPLICANT: WILLETTE, ROBERT N.
;  APPLICANT: ELSHOURBAGY, NABIL A.
;  APPLICANT: LI, XIAOTONG
;  TITLE OF INVENTION: HUMAN CARDIAC/BRAIN TOLLOID-LIKE PROTEIN
;  FILE REFERENCE: ATG-50038-D1
;  CURRENT APPLICATION NUMBER: US/09/432,473
;  CURRENT FILING DATE: 1999-11-01
;  EARLIER APPLICATION NUMBER: 08/991,408
;  EARLIER FILING DATE: 1997-12-16
;  EARLIER APPLICATION NUMBER: 60/034,471
;  EARLIER FILING DATE: 1997-01-02
;  NUMBER OF SEQ ID NOS: 4
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 591
;   TYPE: PRT
;   ORGANISM: HOMO SAPIENS
US-09-432-473-4

  Query Match             8.7%;  Score 172.5;  DB 4;  Length 591;
  Best Local Similarity   36.7%;  Pred. No. 4.6e-09;
  Matches   40;  Conservative   25;  Mismatches   39;  Indels    5;  Gaps    4;

Qy         59 KGNGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVED 118
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Db        202 KLNGTITTPGWPKEYPPNKNCVWQVVAPTQYRISVKFE-FFELE--GNEVCKYDYVEIWS 258

Qy        119 ISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
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Db        259 GLSSESKLHGKFCG-AEVPEVITSQFNNMRIEFKSDN-TVSKKGFKAHF 305


RESULT 15
US-08-866-650-5
; Sequence 5, Application US/08866650
; Patent No. 5939321
;  GENERAL INFORMATION:
;    APPLICANT:  Greenspan, Daniel S
;    APPLICANT:  Takahara, Kazuhiko
;    APPLICANT:  Hoffman, Guy G
;    TITLE OF INVENTION:  Mammalian Tolloid-Like Protein
;    NUMBER OF SEQUENCES:  13
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Quarles & Brady
;      STREET:  1 South Pinckney Street
;      CITY:  Madison
;      STATE:  WI
;      COUNTRY:  US
;      ZIP:  53703
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
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;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/866,650
;      FILING DATE:
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Berson, Bennett J
;      REGISTRATION NUMBER:  37094
;      REFERENCE/DOCKET NUMBER:  960296.93839
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  608-251-5000
;      TELEFAX:  608-251-9166
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;     LENGTH: 1013 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-866-650-5

  Query Match             8.7%;  Score 172.5;  DB 2;  Length 1013;
  Best Local Similarity   36.7%;  Pred. No. 1.1e-08;
  Matches   40;  Conservative   25;  Mismatches   39;  Indels    5;  Gaps    4;

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Qy        119 ISETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYY 167
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Job time : 28 secs
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GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: June 12, 2003, 15:32:31 ; Search time 22 Seconds
(without alignments)
1736.314 Million cell updates/sec

Title: US-09-662-783-2
Perfect score: 1994
Sequence: 1 MHRLIFVYTLICANFCSCRD.....DIQLDHHERCDCICSSRPPR 370

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 392085 seqs, 103240269 residues

Total number of hits satisfying chosen parameters: 392085

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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14: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	1994	100.0	370	9	US-10-086-623-8	Sequence 8, Appli
2	1994	100.0	370	9	US-10-139-583-37	Sequence 37, Appl
3	1994	100.0	370	9	US-10-039-847A-2	Sequence 2, Appli
4	1994	100.0	370	9	US-10-260-539-8	Sequence 8, Appli
5	1994	100.0	370	9	US-10-264-361-5	Sequence 5, Appli
6	1994	100.0	370	9	US-10-258-557-2	Sequence 2, Appli
7	1994	100.0	370	10	US-09-823-033-5	Sequence 5, Appli
8	1994	100.0	370	10	US-09-808-972-2	Sequence 2, Appli
9	1994	100.0	370	10	US-09-915-582-56	Sequence 56, Appl
10	1988	99.7	370	10	US-09-915-582-74	Sequence 74, Appl
11	1949	97.7	364	9	US-10-028-072-186	Sequence 186, App
12	1949	97.7	364	9	US-10-121-049-186	Sequence 186, App
13	1949	97.7	364	9	US-10-123-904-186	Sequence 186, App
14	1949	97.7	364	9	US-10-140-470-186	Sequence 186, App
15	1949	97.7	364	9	US-10-175-746-186	Sequence 186, App
16	1949	97.7	364	9	US-10-176-918-186	Sequence 186, App
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18	1949	97.7	364	9	US-10-137-865-186	Sequence 186, App
19	1949	97.7	364	9	US-10-140-474-186	Sequence 186, App
20	1949	97.7	364	9	US-10-142-431-186	Sequence 186, App
21	1949	97.7	364	9	US-10-143-114-186	Sequence 186, App
22	1949	97.7	364	9	US-10-140-002-186	Sequence 186, App
23	1949	97.7	364	9	US-10-142-419-186	Sequence 186, App
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39	1949	97.7	364	9	US-10-140-925-186	Sequence 186, App
40	1949	97.7	364	9	US-10-160-498-186	Sequence 186, App
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ALIGNMENTS

RESULT 1
US-10-086-623-8
; Sequence 8, Application US/10086623
; Patent No. US20020164710A1
; GENERAL INFORMATION:
; APPLICANT: ERIKSSON, Ulf
; APPLICANT: AASE, Karin
; APPLICANT: LI, Xuri
; APPLICANT: PONTEN, Annica
; APPLICANT: UUTELA, Marko
; APPLICANT: ALITALO, Kari
; APPLICANT: OESTMAN, Arne
; APPLICANT: HELDIN, Carl-Henrik
; TITLE OF INVENTION: PLATELET DERIVED GROWTH FACTOR D, DNA CODING THEREFOR AND USES
; FILE REFERENCE: 1064/44833C2
; CURRENT APPLICATION NUMBER: US/10/086,623
; CURRENT FILING DATE: 2000-03-04
; PRIOR APPLICATION NUMBER: US 60/107,852
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 60/113,997
; PRIOR FILING DATE: 1998-12-28
; PRIOR APPLICATION NUMBER: US 60/150,604
; PRIOR FILING DATE: 1999-08-26
; PRIOR APPLICATION NUMBER: US 60/157,108
; PRIOR FILING DATE: 1999-10-04
; PRIOR APPLICATION NUMBER: US 60/157,756
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: US 09/438,046
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 09/691,200
; PRIOR FILING DATE: 2000-10-19
; NUMBER OF SEQ ID NOS: 42
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 370
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-086-623-8

Query Match 100.0%; Score 1994; DB 9; Length 370;
Best Local Similarity 100.0%; Pred. No. 3e-161;
Matches 370; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 2
US-10-139-583-37
; Sequence 37, Application US/10139583
; Patent No. US20020177193A1
; GENERAL INFORMATION:
; APPLICANT: Gao, Zeren
; APPLICANT: Hart, Charles E.
; APPLICANT: Piddington, Christopher S.
; APPLICANT: Sheppard, Paul O.
; APPLICANT: Shoemaker, Kimberly E.
; APPLICANT: Gilbertson, Debra G.
; APPLICANT: West, James W.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF3
; FILE REFERENCE: 98-60
; CURRENT APPLICATION NUMBER: US/10/139,583
; CURRENT FILING DATE: 2002-05-02
; PRIOR APPLICATION NUMBER: 09/457,066
; PRIOR FILING DATE: 1999-12-07
; NUMBER OF SEQ ID NOS: 50
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 370
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-139-583-37

Query Match 100.0%; Score 1994; DB 9; Length 370;
Best Local Similarity 100.0%; Pred. No. 3e-161;
Matches 370; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
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Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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; Sequence 2, Application US/10039847A
; Publication No. US20020183273A1
; GENERAL INFORMATION:
; APPLICANT: Hart, Charles E.
; APPLICANT: Topouzis, Stavros
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR IMPROVING
; TITLE OF INVENTION: KIDNEY FUNCTION
; FILE REFERENCE: 00-100
; CURRENT APPLICATION NUMBER: US/10/039,847A
; CURRENT FILING DATE: 2002-06-17
; PRIOR APPLICATION NUMBER: US 60/244,479
; PRIOR FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 370
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-039-847A-2

Query Match 100.0%; Score 1994; DB 9; Length 370;
Best Local Similarity 100.0%; Pred. No. 3e-161;
Matches 370; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
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Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
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Db        361 DCICSSRPPR 370
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RESULT 4
US-10-260-539-8

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; Sequence 8, Application US/10260539
; Publication No. US20030073637A1
; GENERAL INFORMATION:
;  APPLICANT: ERIKSSON, Ulf
;  APPLICANT:  AASE, Karin
;  APPLICANT:  LI, Xuri
;  APPLICANT:  PONTEN, Annica
;  APPLICANT:  UUTELA, Marko
;  APPLICANT:  ALITALO, Kari
;  APPLICANT:  OESTMAN, Arne
;  APPLICANT:  HELDIN, Carl-Henrik
;  TITLE OF INVENTION: PLATELET DERIVED GROWTH FACTOR D, DNA CODING THEREFOR AND USES TH
;  FILE REFERENCE: 1064/44833C2
;  CURRENT APPLICATION NUMBER: US/10/260,539
;  CURRENT FILING DATE:  2002-10-01
;  PRIOR APPLICATION NUMBER: US/10/086,623
;  PRIOR FILING DATE: 2000-03-04
;  PRIOR APPLICATION NUMBER: US 60/107,852
;  PRIOR FILING DATE: 1998-11-10
;  PRIOR APPLICATION NUMBER: US 60/113,997
;  PRIOR FILING DATE: 1998-12-28
;  PRIOR APPLICATION NUMBER: US 60/150,604
;  PRIOR FILING DATE: 1999-08-26
;  PRIOR APPLICATION NUMBER: US 60/157,108
;  PRIOR FILING DATE: 1999-10-04
;  PRIOR APPLICATION NUMBER: US 60/157,756
;  PRIOR FILING DATE: 1999-10-05
;  PRIOR APPLICATION NUMBER: US 09/438,046
;  PRIOR FILING DATE: 1999-11-10
;  PRIOR APPLICATION NUMBER: US 09/691,200
;  PRIOR FILING DATE: 2000-10-19
;  NUMBER OF SEQ ID NOS: 42
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
;   LENGTH: 370
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-260-539-8

  Query Match             100.0%;  Score 1994;  DB 9;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 3e-161;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 5
US-10-264-361-5
; Sequence 5, Application US/10264361
; Publication No. US20030087870A1
; GENERAL INFORMATION:
;  APPLICANT: Gilbertson, Debra G.
;  TITLE OF INVENTION: METHOD OF TREATING FIBROSIS
;  FILE REFERENCE: 00-53
;  CURRENT APPLICATION NUMBER: US/10/264,361
;  CURRENT FILING DATE:  2002-10-03
;  PRIOR APPLICATION NUMBER: US/09/695,121
;  PRIOR FILING DATE: 2000-10-23
;  NUMBER OF SEQ ID NOS: 18
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
;   LENGTH: 370
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-10-264-361-5

  Query Match             100.0%;  Score 1994;  DB 9;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 3e-161;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 6
US-10-258-557-2
; Sequence 2, Application US/10258557
; Publication No. US20030100502A1
; GENERAL INFORMATION:
;  APPLICANT: Beals, John
;  APPLICANT:  Gonzalez-DeWhitt, Patricia
;  APPLICANT:  Hammond, Lisa
;  APPLICANT:  Lu, Jirong
;  APPLICANT:  Na, Songqing
;  APPLICANT:  Su, Eric
;  APPLICANT:  Witcher, Derrick
;  TITLE OF INVENTION: TREATING MUSCULOSKELETAL DISORDERS USING LP85 AND ANALOGS THER
;  FILE REFERENCE: X-14392M
;  CURRENT APPLICATION NUMBER: US/10/258,557
;  CURRENT FILING DATE:  2002-10-23
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2
;   LENGTH: 370
;   TYPE: PRT
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;   ORGANISM: Homo sapiens
US-10-258-557-2

  Query Match           100.0%;  Score 1994;  DB 9;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 3e-161;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 7
US-09-823-033-5
; Sequence 5, Application US/09823033
; Patent No. US20020004225A1
; GENERAL INFORMATION:
;  APPLICANT: Hart, Charles E.
;  APPLICANT:  Gilbertson, Debra G.
;  TITLE OF INVENTION: METHODS FOR PROMOTING GROWTH OF BONE,
;  TITLE OF INVENTION:  LIGAMENT AND CARTILAGE
;  FILE REFERENCE: 00-12
;  CURRENT APPLICATION NUMBER: US/09/823,033
;  CURRENT FILING DATE:  2001-03-29
;  NUMBER OF SEQ ID NOS: 5
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
;   LENGTH: 370
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-823-033-5

  Query Match           100.0%;  Score 1994;  DB 10;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 3e-161;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 8
US-09-808-972-2
; Sequence 2, Application US/09808972
; Patent No. US20020064832A1
; GENERAL INFORMATION:
;  APPLICANT: Hart, Charles E.
;  APPLICANT:  Topouzis, Stavros
;  APPLICANT:  Gilbertson, Debra G.
;  TITLE OF INVENTION: METHOD OF TREATING FIBROPROLIFERATIVE
;  TITLE OF INVENTION:  DISORDERS
;  FILE REFERENCE: 00-79
;  CURRENT APPLICATION NUMBER: US/09/808,972
;  CURRENT FILING DATE:  2001-03-14
;  PRIOR APPLICATION NUMBER: US 60/235,295
;  PRIOR FILING DATE: 2000-09-26
;  PRIOR APPLICATION NUMBER: US 09/564,595
;  PRIOR FILING DATE: 2000-05-03
;  PRIOR APPLICATION NUMBER: US 60/180,169
;  PRIOR FILING DATE: 2000-02-04
;  PRIOR APPLICATION NUMBER: US 60/164,463
;  PRIOR FILING DATE: 1999-11-10
;  PRIOR APPLICATION NUMBER: US 60/132,250
;  PRIOR FILING DATE: 1999-05-03
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 2
;   LENGTH: 370
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-808-972-2

  Query Match           100.0%;  Score 1994;  DB 10;  Length 370;
  Best Local Similarity  100.0%;  Pred. No. 3e-161;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 9
US-09-915-582-56
; Sequence 56, Application US/09915582
; Patent No. US20020120103A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: 17 Human Secreted Proteins
;  FILE REFERENCE: PS723P1
;  CURRENT APPLICATION NUMBER: US/09/915,582
;  CURRENT FILING DATE:  2001-07-27
;  PRIOR APPLICATION NUMBER: PCT/US01/01431
;  PRIOR FILING DATE: 2001-01-17
;  PRIOR APPLICATION NUMBER: 60/179,065
;  PRIOR FILING DATE: 2000-01-31
;  PRIOR APPLICATION NUMBER: 60/180,628
;  PRIOR FILING DATE: 2000-02-04
;  PRIOR APPLICATION NUMBER: 60/231,968
;  PRIOR FILING DATE: 2000-09-12
;  NUMBER OF SEQ ID NOS: 97
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 56
;   LENGTH: 370
;   TYPE: PRT
;   ORGANISM: Homo sapiens
US-09-915-582-56

  Query Match             100.0%;  Score 1994;  DB 10;  Length 370;
  Best Local Similarity   100.0%;  Pred. No. 3e-161;
  Matches  370;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 10
US-09-915-582-74
; Sequence 74, Application US/09915582
; Patent No. US20020120103A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: 17 Human Secreted Proteins
;  FILE REFERENCE: PS723P1
;  CURRENT APPLICATION NUMBER: US/09/915,582
;  CURRENT FILING DATE:  2001-07-27
;  PRIOR APPLICATION NUMBER: PCT/US01/01431
;  PRIOR FILING DATE: 2001-01-17
;  PRIOR APPLICATION NUMBER: 60/179,065
;  PRIOR FILING DATE: 2000-01-31
;  PRIOR APPLICATION NUMBER: 60/180,628
;  PRIOR FILING DATE: 2000-02-04
;  PRIOR APPLICATION NUMBER: 60/231,968
;  PRIOR FILING DATE: 2000-09-12
;  NUMBER OF SEQ ID NOS: 97
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 74
;   LENGTH: 370
;   TYPE: PRT
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: SITE
;   LOCATION: (216)
;   OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-915-582-74

  Query Match             99.7%;  Score 1988;  DB 10;  Length 370;
  Best Local Similarity   99.7%;  Pred. No. 9.6e-161;
  Matches  369;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAXFDTVEDLLKYFNPESWQEDLENMY 240

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        361 DCICSSRPPR 370


RESULT 11
US-10-028-072-186
; Sequence 186, Application US/10028072
; Publication No. US20030004311A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
```

; APPLICANT: Stewart,Timothy A.
; APPLICANT: Tumas,Daniel
; APPLICANT: Watanabe,Colin K
; APPLICANT: Wood,William
; APPLICANT: Zhang
; TITLE OF INVENTION:
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/028,072
; CURRENT FILING DATE: 2001-12-19
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18
; PRIOR APPLICATION NUMBER: 60/056974
; PRIOR FILING DATE: 1997-08-26
; PRIOR APPLICATION NUMBER: 60/059113
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059115
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059117
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059122
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059184
; PRIOR FILING DATE: 1997-09-17
; PRIOR APPLICATION NUMBER: 60/059263
; PRIOR FILING DATE: 1997-09-18
; PRIOR APPLICATION NUMBER: 60/059352
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059588
; PRIOR FILING DATE: 1997-09-19
; PRIOR APPLICATION NUMBER: 60/059836
; PRIOR FILING DATE: 1997-09-24
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062285
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062287
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/062814
; PRIOR FILING DATE: 1997-10-24
; PRIOR APPLICATION NUMBER: 60/062816
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; PRIOR FILING DATE: 1997-10-24
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; PRIOR APPLICATION NUMBER: 60/063327
; PRIOR FILING DATE: 1997-10-27
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; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063733
; PRIOR FILING DATE: 1997-10-29
; PRIOR APPLICATION NUMBER: 60/063735
; PRIOR FILING DATE: 1997-10-29
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; PRIOR APPLICATION NUMBER: 60/064809
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; PRIOR APPLICATION NUMBER: 60/065846
; PRIOR FILING DATE: 1997-11-17
; PRIOR APPLICATION NUMBER: 60/066364
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; PRIOR FILING DATE: 1998-02-04
; PRIOR APPLICATION NUMBER: 60/074086
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; PRIOR APPLICATION NUMBER: 60/077791
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; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079663
; PRIOR FILING DATE: 1998-02-27
; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081695
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; PRIOR APPLICATION NUMBER: 60/081818
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; PRIOR FILING DATE: 1998-04-24
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/083545
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084627
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084637
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/085149
; PRIOR FILING DATE: 1998-05-12
; PRIOR APPLICATION NUMBER: 60/085323
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085338
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085339
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
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; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/086414

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;  PRIOR FILING DATE: 1998-05-22
;  PRIOR APPLICATION NUMBER: 60/086430
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;  PRIOR APPLICATION NUMBER: 60/088810
;  PRIOR FILING DATE: 1998-06-10
;  PRIOR APPLICATION NUMBER: 60/088858
;  PRIOR FILING DATE: 19/98-06-11
;  PRIOR APPLICATION NUMBER: 60/089532
;  PRIOR FILING DATE: 1998-06-17
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;  PRIOR FILING DATE: 1998-06-23
;  PRIOR APPLICATION NUMBER: 60/090429
;  PRIOR FILING DATE: 1998-06-24
;  PRIOR APPLICATION NUMBER: 60/090445
;  PRIOR FILING DATE: 1998-06-24
;  PRIOR APPLICATION NUMBER: 60/090538
;  PRIOR FILING DATE: 1998-06-24
;  PRIOR APPLICATION NUMBER: 60/090863
;  PRIOR FILING DATE: 1998-06-26
;  PRIOR APPLICATION NUMBER: 60/091360
;  PRIOR FILING DATE: 1998-07-01
;  PRIOR APPLICATION NUMBER: 60/091519
;  PRIOR FILING DATE: 1998-07-02
;  PRIOR APPLICATION NUMBER: 60/091982
;  PRIOR FILING DATE: 1998-07-07

  Query Match             97.7%;  Score 1949;  DB 9;  Length 364;
  Best Local Similarity   98.4%;  Pred. No. 1.9e-157;
  Matches  364;  Conservative    0;  Mismatches    0;  Indels    6;  Gaps    1;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||      ||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRD------DLYRRDETIQVKG 54

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 114

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 174

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 234

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 294

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 354

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        355 DCICSSRPPR 364
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RESULT 12
US-10-121-049-186
; Sequence 186, Application US/10121049
; Publication No. US20030022239A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C17
;  CURRENT APPLICATION NUMBER: US/10/121,049
;  CURRENT FILING DATE:  2002-04-12
;       Prior Application removed - See File Wrapper or Palm
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 186
;   LENGTH: 364
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-121-049-186

  Query Match             97.7%;  Score 1949;  DB 9;  Length 364;
  Best Local Similarity   98.4%;  Pred. No. 1.9e-157;
  Matches  364;  Conservative    0;  Mismatches    0;  Indels    6;  Gaps    1;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||      ||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRD------DLYRRDETIQVKG 54

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 114

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 174

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 234

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 294

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 354

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        355 DCICSSRPPR 364


RESULT 13
US-10-123-904-186
; Sequence 186, Application US/10123904
; Publication No. US20030022328A1
; GENERAL INFORMATION:
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;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C54
;  CURRENT APPLICATION NUMBER: US/10/123,904
;  CURRENT FILING DATE:  2002-04-16
;  Prior Application removed - See File Wrapper or Palm
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 186
;   LENGTH: 364
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-123-904-186

  Query Match             97.7%;  Score 1949;  DB 9;  Length 364;
  Best Local Similarity   98.4%;  Pred. No. 1.9e-157;
  Matches  364;  Conservative    0;  Mismatches    0;  Indels    6;  Gaps    1;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||      ||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRD------DLYRRDETIQVKG 54

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 114

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 174

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 234

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 294

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 354

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        355 DCICSSRPPR 364


RESULT 14
US-10-140-470-186
; Sequence 186, Application US/10140470
; Publication No. US20030022331A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C160
;  CURRENT APPLICATION NUMBER: US/10/140,470
;  CURRENT FILING DATE:  2002-05-06
;  Prior Application removed - See Palm or File Wrapper
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 186
;   LENGTH: 364
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-140-470-186

  Query Match             97.7%;  Score 1949;  DB 9;  Length 364;
  Best Local Similarity   98.4%;  Pred. No. 1.9e-157;
  Matches  364;  Conservative    0;  Mismatches    0;  Indels    6;  Gaps    1;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||      ||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRD------DLYRRDETIQVKG 54

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 114

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 174

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 234

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 294

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 354

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        355 DCICSSRPPR 364


RESULT 15
US-10-175-746-186
; Sequence 186, Application US/10175746
; Publication No. US20030027270A1
; GENERAL INFORMATION:
;  APPLICANT: Baker,Kevin P.
;  APPLICANT:  Beresini,Maureen
;  APPLICANT:  DeForge,Laura
;  APPLICANT:  Desnoyers,Luc
;  APPLICANT:  Filvaroff,Ellen
;  APPLICANT:  Gao,Wei-Qiang
;  APPLICANT:  Gerritsen,Mary E.
;  APPLICANT:  Goddard,Audrey
;  APPLICANT:  Godowski,Paul J.
;  APPLICANT:  Gurney,Austin L.
```

```
;  APPLICANT:  Sherwood,Steven
;  APPLICANT:  Smith,Victoria
;  APPLICANT:  Stewart,Timothy A.
;  APPLICANT:  Tumas,Daniel
;  APPLICANT:  Watanabe,Colin K
;  APPLICANT:  Wood,William
;  APPLICANT:  Zhang, Zemin
;  TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
;  TITLE OF INVENTION:  ACIDS ENCODING THE SAME
;  FILE REFERENCE: P3330R1C353
;  CURRENT APPLICATION NUMBER: US/10/175,746
;  CURRENT FILING DATE:  2002-06-19
;  Prior Application removed - See File Wrapper or Palm
;  NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 186
;   LENGTH: 364
;   TYPE: PRT
;   ORGANISM: Homo Sapien
US-10-175-746-186

  Query Match             97.7%;  Score 1949;  DB 9;  Length 364;
  Best Local Similarity   98.4%;  Pred. No. 1.9e-157;
  Matches  364;  Conservative    0;  Mismatches    0;  Indels    6;  Gaps    1;

Qy          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRDESNHLTDLYRRDETIQVKG 60
              ||||||||||||||||||||||||||||||||||||||||      ||||||||||||
Db          1 MHRLIFVYTLICANFCSCRDTSATPQSASIKALRNANLRRD------DLYRRDETIQVKG 54

Qy         61 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 NGYVQSPRFPNSYPRNLLLTWRLHSQENTRIQLVFDNQFGLEEAENDICRYDFVEVEDIS 114

Qy        121 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ETSTIIRGRWCGHKEVPPRIKSRTNQIKITFKSDDYFVAKPGFKIYYSLLEDFQPAAASE 174

Qy        181 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 TNWESVTSSISGVSYNSPSVTDPTLIADALDKKIAEFDTVEDLLKYFNPESWQEDLENMY 234

Qy        241 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 LDTPRYRGRSYHDRKSKVDLDRLNDDAKRYSCTPRNYSVNIREELKLANVVFFPRCLLVQ 294

Qy        301 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 RCGGNCGCGTVNWRSCTCNSGKTVKKYHEVLQFEPGHIKRRGRAKTMALVDIQLDHHERC 354

Qy        361 DCICSSRPPR 370
              ||||||||||
Db        355 DCICSSRPPR 364


Search completed: June 12, 2003, 15:40:45
Job time : 25 secs
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